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DETROIT

A National Newspaper for Every Branch of the Industry

Automotive Daily News

★CARS★ SHOP EQUIPMENT TRUCKS ★★AVIATION★★ PARTS ACCESSORIES ★TIRES★

Vol. 9. No. 1111 — Entered as second-class matter Aug. 27, 1925, Post Office, N. Y., N. Y., Under Act of March 3, 1879. — NEW YORK, TUESDAY, DECEMBER 31, 1929 — 10 Cents. $12 Per Year

Airplane Engine Powers Franklin 1930 Line

MOTOR PRODUCTS HOLD LEADERSHIP IN U. S. EXPORTS

Foreign Shipments in 1929 $550,000,000; Up 10 Per Cent.

WASHINGTON, Dec. 30.—The year 1929 was a record breaker in the foreign trade of the United States, both exports and imports showing increases over the preceding year and reaching totals which decidedly surpass any attained even during the war and the immediate post-war boom.

The automobile continued at the head of the American export trade, followed in order by unmanufactured cotton, gasoline, refined copper, and agricultural machinery and implements.

Shipments abroad of automotive products reached a total of more than $550,000,000, an increase of 10 per cent., notwithstanding that toward the close of the year foreign sales were somewhat less than in the corresponding months of 1928.

In the first nine months of this year, the shipments of automobiles and other leading export commodities amounted to $3,844,000,000, or slightly more than 8 per cent greater than for the same period a year ago.

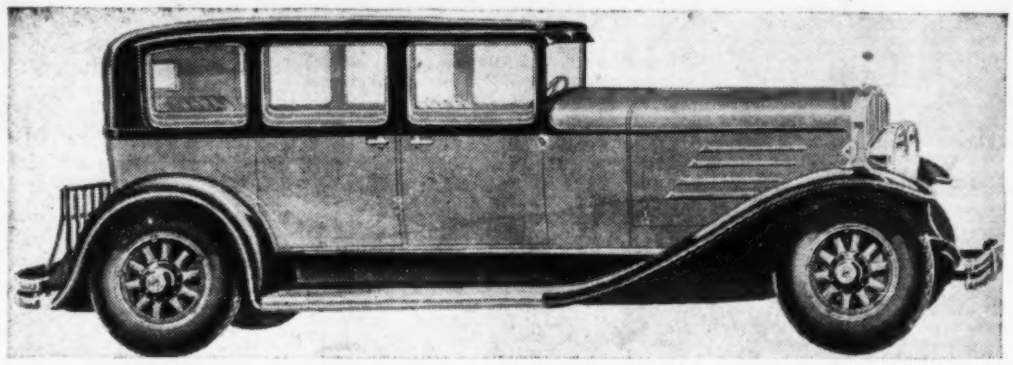
Exports of automobiles, parts and accessories in the first nine months of this year amounted to $455,383,000, or 22 per cent. larger than for the corresponding period of 1928 and 73 per cent. greater than for the average value of the same period of the five years from 1924 to 1928.

During the first nine months of 1929 American manufacturers exported 292,000 passenger cars and 162,451 motor trucks and buses.

William L. Cooper, director of the Bureau of Foreign and Domestic Commerce of the Department of Commerce, today declared that the record-breaking foreign trade of the

(Continued on Page 2)

Franklin 7 Passenger Sedan for 1930



White Company Announces New, Improved Bus Chassis

By W. R. CROWELL

CLEVELAND, Dec. 30.—**The White Company today announced a new bus chassis, embodying several exclusive mechanical refinements, giving the company a line of five six-cylinder bus chassis ranging in seating capacity from 18 to 41 passengers on wheel bases of 170 to 250 inches.**

The new chassis combines all of the features of the Model 65 and in addition is of longer wheel base, affords greater seating capacity, has a heavier frame, spring and axles, larger tires and a gross weight of 18,000 pounds. It has been designated Model 65-A.

Mechanical refinements include a full-floating rear axle assembly providing increased gross weight capacity and either hydraulic or Westinghouse air-operated brakes. It is a 29-seater, pay-enter type, or 25-passenger Pullman of the highway type.

The engine is of 396 cubic inch displacement, with a bore of 4 inches, stroke of 5¼ inches, and a large diameter crank shaft running in seven main bearings. Aluminum alloy pistons are of the constant clearance type, and combustion chambers uniformly machined.

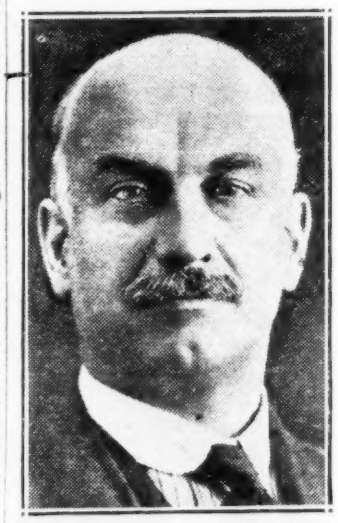
Overhead valves, operated by rocker arms through push-rods, give silent operation with a maximum of power. Cam shaft and accessory shaft are driven by a silent front and timing chain. The timing unit is driven from the accessory shaft by skew gearings and an extension-operated generator and water pump, both cradle-mounted and positively aligned on the crank case.

The White six-cylinder bus line now includes Model 61 of 12-15 capacity on 170-inch wheel base; Model 65 of 18-21 passenger capacity on 212-inch wheel base; Model 54 of 25-33 capacity on 227 and 240 inch wheel base; Model 54A of 38-41 passenger capacity on 250-inch wheel base.

RECEIVERSHIP SUIT FILED AGAINST STUTZ COMPANY

Indianapolis, Dec. 30.—A receivership suit was filed against the Stutz Motor Car Company of America in Marion county Superior Court today by the Standard Automotive Parts Company.

AUSTIN ARRIVES IN U. S.



SIR HERBERT AUSTIN, father of the bantam Austin car, and director of the American Austin Car Company of Detroit, who will witness the debut of the American Austin model at a special showing to the automotive trade during the New York and Chicago automobile shows in January. He arrived in New York yesterday on the Berengaria.

Franklin Prices for 1930 Are Announced

Syracuse, N. Y., Dec. 30.—The following are the prices on the new Franklin line for 1930:—

SERIES 145

Sedan	$2,485
Coupe	2,510
Club Sedan	2,575
De Luxe Sedan	2,585
Victoria Brougham	2,595
Convertible Coupe	2,610
Town Sedan	2,625
Pursuit	2,670

SERIES 147

Five-Passenger Sedan	$2,600
Seven-Passenger Sedan	2,775
Roadster	2,785
Pirate Touring	2,785
Pirate Phaeton	2,870
Limousine	2,970
Sedan Limousine	3,050
Speedster	3,375

CUSTOM BODIES

Dietrich Convertible Speedster	$3,625
Dietrich Deauville Sedan	5,000
Dietrich Town Car	5,100
Derham Cabriolet	6,000
Locke Convertible Sedan	7,500

WHITE TAKING INVENTORY

Cleveland, Dec. 30. — The White Company closed at midnight Christmas Eve and will remain shut down for annual inventory until January 2.

DEVELOPS 95 H. P.; 2 CHASSIS WITH 16 STANDARD BODIES

Price Range, Including Custom Models, $2,400 to $10,000

SYRACUSE, N. Y., Dec. 30.—Driven by the first airplane type motor ever employed in an automobile, one which, it is stated, has already successfully flown an airplane, the new line of Franklin automobiles is announced by the Franklin Automobile Company. The new, air-cooled engine develops ninety-five horsepower at 3,100 revolutions a minute.

Two series of cars are included in the line, comprising complete groups of body models on chassis of 125-inch and 132-inch wheelbases. The Series 145 is mounted on the former and the Series 147 is mounted on the latter, which, combined with the custom car models, gives the Franklin company complete price coverage in the quality car field from $2,400 up to $10,000.

Included in the presentation of the sixteen standard body models are four distinctive sports creations. These are the 1930 speedster, which follows in design the custom-built model that was introduced in limited production a few months ago and proved so popular; the five-passenger Pursuit, the five-passenger Pirate touring and the seven-passenger Pirate phaeton. All of these cars are in the standard line and were inspired by recent Franklin models which met with favor among the world's leading custom car designers at recent salons. Such

(Continued on Page 4)

Indianapolis Car Makers Complete N. Y. Show Plans

INDIANAPOLIS, Dec. 30.—**Activity at motor car factories here during the last week centered about preparations for exhibition of 1930 products at the annual auto show opening at New York Saturday.**

Incidentally, however, announcement was made at the Ford Motor Company's assembly plant here that production of passenger cars would be resumed January 2. The Ford plant has been on curtailed schedule since late in November, when passenger car output was discontinued. The reopening Thursday comes several days in advance of the date tentatively set, and, although production will be held to about a hundred cars and trucks daily, temporarily, due to tardiness of materials in arriving for the assembly line. Normally output is 160 cars daily and employment 1,100. Both these figures are expected by Ford officials to be increased during early spring by addition of a night shift of workmen. The wage scale will be advanced $1 daily, in accordance with the Ford policy of advancing pay rates recently announced at Washington, it was understood here.

In connection with the show, heads of all local automobile factories and the executive staffs expected to leave here for New York this week. At the factory of the Marmon Motor Car Company, where production is reported as about 100 cars daily, work was hampered somewhat by turning out models for the various auto shows scheduled to follow the Gotham exhibit. Marmon will send the largest

(Continued on Page 2)

TOMORROW, New Year's Day, there will be no issue of the Automotive Daily News.

General Motors to Have Special New York Showing

NEW YORK, Dec. 30.—**General Motors invades the heart of Broadway next week with a show lasting five days—January 6 to 10—with the greater part of the ground floor of the Hotel Astor as its setting.**

In this comfortable, convenient location, colorfully decorated, will be presented the members of this famous family, many of them making their debut. Here General Motors' cars of the latest design, in beautiful color combinations, will vie with their surroundings. A well known concert orchestra will entertain afternoons and evenings. The showing will be continuous daily from 10 a. m. to midnight. Admission will be free.

One of the stars of this exhibit will be Cadillac, with an advance showing of the new 16-cylinder car, supplementing the present 8-cylinder models. Another old favorite in a new role will be Oakland, making its premiere in the 8-cylinder field. Newcomers in the showing will be Viking and Marquette, the new members in 1929 of the General Motors family.

Chevrolet, after a most successful year in the 6-cylinder field, comes to the showing as "The Greatest Chevrolet in Chevrolet History," proudly exhibiting a more powerful motor and other mechanical improvements, refinements in design and new colors. The Pontiac Big Six will reveal itself as a "Bigger Six," improved in design with many mechanical refinements. Buick will demonstrate what its builders regard as the master of its class. Oldsmobile will display numerous refinements and changes since the 1929 showing. The V-8 Cadillac and its companion car, La Salle, will hold forth in all the splendor of the newest in body trends not only by Fisher, but by Fleetwood as well.

The art of body craftsmanship will be shown in a cutaway exhibit by Fisher, and the artistry of modern interior and exterior fitments in a display by Ternstedt. The General Motors Truck Company will exhibit its latest trucks, commercial cars and taxicabs, while Chevrolet makes a comprehensive showing of commercial cars and trucks with various body and utility combinations.

In all, forty-eight automobiles

(Continued on Page 6)

Lamont Predicts Business Prosperity Will Continue

WASHINGTON, Dec. 30.—American business in 1929 reached higher levels than ever before, notwithstanding recessions in some lines in the later months, says Robert P. Lamont, secretary of commerce.

"Measured by quantities, not value, the output of our manufacturing industries broke all previous records, being 8 per cent. higher than in 1928," Mr. Lamont states.

Freight carloadings rose by 3 per cent. Employment in manufacturing industry and the amount of wage payments were both considerably greater in 1929 than in the preceding year, Mr. Lamont added, continuing:

"Our domestic trade, as indicated by the sales of department stores, mail-order houses and chain-store systems, attained peaks never before touched.

"The solid economic progress that I have indicated was not in any sense the result of a 'boom.' Its very substantial character helped greatly to alleviate the effects of the marked break in prices of Stock Exchange securities during October and November.

"Automobile production last year reached about 5,500,000 units, by far the largest output ever attained. Although the closing months showed a greater seasonal decline than usual, the very large production during the other months brought about an increase, for the year as a whole, of 27 per cent., as compared with 1928. The exports of automobiles have rapidly increased, reaching a peak total in 1929.

"Exports of American manufactured goods reached the huge total of approximately $3,250,000,000, about 9 per cent. greater than in 1928, and about 80 per cent. more than in 1922. This growth of exports has made possible more continuous employment of American labor and capital.

"Broadly speaking, the business history of 1929 recorded the continuation of a movement which has been substantially unbroken for an exceptionally long period. It is impossible, of course, to forecast what temporary ups and downs may occur. But the nature of the economic development of the United States is such that one may confidently predict, for the long run, a continuance of prosperity and progress."

FORD ANNOUNCES PLANT EXPANSION IN 1930 TO COST $30,000,000 UPWARD

Detroit, Dec. 30.—Indicating confidence in the outlook for continued expansion in 1930 of the Ford Motor Company's business, expenditures of more than $30,000,000 for plant development were announced today by Edsel B. Ford.

The 1930 development plans are a continuation of a general expansion by the Ford company throughout the world this year and include an outlay of more than $20,000,000 for new buildings and additions and in excess of $10,000,000 for equipment. The expenditures will be made in various sections of the United States and are exclusive of new outlays by affiliated plants in foreign countries.

According to Mr. Ford, the company reached the highest state of development in its history during 1929, adding that he expected the further expansion will justify, in part, the recent increase in wages which will result in additional payments of $20,000,000 annually to Ford employees.

Production of the Ford company for the first eleven months of 1929 totaled 1,914,842 cars and trucks.

AUTO-LITE GIVEN FORD GENERATOR CONTRACT

Toledo, O., Dec. 30.—Announcement is made here that Henry Ford will dismantle several of his small parts departments, turning over the making of his full generator output to the Electric Auto-Lite plant here. Auto-Lite is rushing completion of a $1,000,000 addition to its plant in order to take care of the new contract received when the firm bid a lower figure than Ford could produce the generators for himself.

AUTOMOBILES LEAD IN 1929 EXPORTS

(Continued From Page 1)

United States this year marks the continuance of a movement practically unbroken since 1921 and 1922, "reflecting the steadily growing efficiency of American industry in production and of American merchants in pushing sales."

He pointed out that if December shows the same figures as that month did in 1928, total exports will amount to about $5,300,000,000, or between 3 and 4 per cent. more than during the preceding year, while imports will amount to about $4,450,000,000, an increase of 8 per cent.

"The gain in export trade for 1929 was confined, in the main, to the first four months of the year," Mr. Cooper said, "during which our foreign sales were nearly $300,000,000 greater than in the corresponding months of 1928. The remaining eight months showed either less increase or an actual decrease as compared with 1928."

Automotive manufacturers appear to be making distinct progress in foreign markets in the face of continued competition. Automobiles and trucks, gasoline, lubricating oil, copper, tractors and agricultural machinery figured largely in the total exports this year to the leading customer countries, Canada, the United Kingdom, France, Argentina and Australia.

Canada bought nearly three-fourths of a million dollars' worth of American merchandise, an increase of nearly $60,000,000, or 8.9 per cent. greater than for the corresponding period of 1928.

The United Kingdom took 15.3 per cent. of our total exports, totaling $590,000,000, a gain of 7.5 per cent. over last year.

Sales to France increased more $25,000,000 to a total of $179,508,000, a gain of 16.4 per cent. over her purchase a year ago.

Sales to Argentina increased nearly one-third, amounting to $163,957,000, a gain of $38,000,000, or 30.4 per cent. over her purchases a year ago.

Australia also was listed among the markets with substantial increases in purchases of American merchandise. Exports to Australia totaled $115,139,000, 11.3 per cent. larger than in 1928.

N. Y. SHOW PLANS SPEED UP INDIANAPOLIS PLANTS

(Continued From Page 1)

Indianapolis delegation to New York. Blackhawk, representing the only six-cylinder car in the Indianapolis field, will be displayed in sixes and eights with its companion line of Stutz cars. Duesenberg, although not to be shown in the main exhibit, will have a special display at the Commodore Hotel.

Indianapolis cars, beginning with the Marmon Roosevelt in the thousand-dollar field, and with other Marmon models up to $3,000 will represent practically every price class. Blackhawk, Stutz and Duesenberg complete the range to the top of the American price scale. Excepting the Blackhawk, which is available in both the six and eight classifications, it is the only local product that is not a straight eight.

SPARKS *from* DETROIT

Looking Forward

* * *

Business Holding Up

* * *

Snow and Dust

Fred Kingsbury—Detroit Editor

EXECUTIVES in every line of business and manufacturing are endeavoring to look forward and discover what conditions will exist during the coming year and nearly all are making surveys in an effort to gauge their output and find out just what they may expect.

Up to this time, nothing has been said about the advertising business, although agencies serve as a fine index for information on what may be expected.

In connection with the recent conference of business and industrial leaders held in Washington at the invitation of President Hoover, a number of surveys were carried out through advertising agencies. Stanley Resor, president of the J. Walter Thompson Company agency, was named advertising committeeman.

Mr. Resor says that while figures covering advertising activity at present or for the next six months are not a safe index for future business activity, they do have value as a register of the attitude of business towards the future.

He also reports that ninety-eight advertising agencies out of 134 members of the American Association of Advertising Agencies, representing more than 4,000 national advertisers, have made a survey of their prospective business for the first half of 1930, compared with the first half of 1929. Less than ten report declines in billings, the remaining eighty-eight report gains, most of which average between 10 and 20 per cent.

This, according to Mr. Resor, clearly shows the attitude of business towards the future as registered by contracts for advertising in the next six months.

It would seem to indicate what the aggressive business concerns of the country and some foreign countries think of the prospects in consuming markets.

Automobile manufacturers, as a rule, are large advertisers, so this surely indicates how they feel about prospects in the near future.

* * *

REPORTS just received from Douglas, Ariz., are to the effect that motorists there do not like spikes, nails, tacks and other sharp metal objects. Recently Boy Scouts of that city organized an anti-puncture campaign and they have picked up about 50,000 nails and tacks. Some of the boys are dragging the streets and alleys with magnets.

There also is another report from that section that never before have the Arizona roads been so dusty. This is due to delayed winter rains.

We'll trade a little of the snow in Detroit for a little dust.

* * *

MANUFACTURERS of power implements for farmers are getting busy for a good season next year, it is reported. Recently the secretary of agriculture, Arthur M. Hyde, called attention to the fact that there are approximately 853,000 tractors on the farms of the country and that modern tractors are greatly improved in design and construction. The equipment going into them also is more strongly built.

A thousand dollars buys more value in tractors today than twice the amount before the World War.

We might go still further and say that this great development of power farm machinery was brought about by the development of the modern automobile.

* * *

IT is interesting, especially to automobile manufacturers, to note that cuts in prices of stainless steel from 1 to 6 cents have been announced. There is a great deal of talk regarding the use of stainless steel in the motor car industry and considerable more will be heard about it during the coming year. It is believed that several manufacturers will adopt the use of this steel in the near future. Of course, price and production will govern its use as far as the motor car business is concerned.

NEWTON STEEL COMPLETING NEW $7,000,000 PLANT

Toledo, O., Dec. 30.—The new $7,000,000 plant of the Newton Steel Company, located at Monroe, Mich., near here, will be ready for operation early in February, it has been announced by E. F. Clark, president of Newton. Clark also announced that operations at the Newton Falls plant of his company were recovering rapidly, due to renewed buying by automobile companies.

Easy steering when turning corners

EVEN on sharp right-hand turns, Gemmer-steered cars are easy to handle. The steering worm is shaped like an hour-glass, making it possible to adjust the gear so steering pressures are equal at all positions of the wheel. Explain this feature to your prospects when you sell a car with "steering by Gemmer."

GEMMER MANUFACTURING COMPANY
Detroit, Michigan

GEMMER

"SMOOTHER STEERED WHEN GEMMER GEARED"

30th triumphant year of the National

AUTO SHOW

GRAND CENTRAL PALACE

LEXINGTON AV. at 46 St., N.Y.C.

JAN. 4 to 11

Opens Saturday at 2 p. m.
Daily thereafter *(except Sunday)*
10 a.m. to 10.30 p.m. ADM. 75c

THE latest motor car creations—300 models of 46 makes. New straight eights; new sixes and four-cylinder models; also sixteen cylinder offering. Such features as synchronized transmission, advanced body design and new accessories for greater driving comfort make this exposition one of exceptional interest. Motor cars exhibited on 1st, 2nd and 3rd floors; accessories on 3rd and 4th. Shop Equipment section (open to public after 5 p. m.) on 4th floor.

Michigan November Sales of 7 Cars Top 1928

TOTAL BUSINESS SHOWS DECLINE

Lansing, Mich, Dec. 30.—Sales of new passenger automobiles in Michigan in November dropped under the corresponding month of last year for the first time in 1929. Gains over the corresponding months of 1928, made in the preceding months of this year, were so large, however, that the state has already registered more cars than in all of 1928 and established a new high record for all time.

Registrations in November, as reported by the State License Bureau, amounted to 6,130, as compared with 9,938 in November, 1928, and 11,893 in October, 1929. This was a decline of 3,808 units from the corresponding month a year ago, equal to 38 per cent., and 5,763 cars from the level of October, 1929, a loss of 48 per cent.

Sales of several cars went against the trend, however, and registrations in November exceeded those of November, 1928.

The most notable gain was made by Chevrolet, sales of which amounted to 1,271 last month, as against 987 in the corresponding month of 1928, a gain of 284 cars, or 28 per cent.

Cadillac registrations last month totaled 78, as against 66 in November last year, a gain of 12 units, or 18 per cent.

Four Franklin cars were registered in the state during the month, as compared with none in November, 1928.

Marmon sales also increased more than 100 per cent., amounting to fifty-one, as against twenty-five in November, 1928.

Pierce-Arrow sales amounted to five, as compared with three.

Following are November sales by makes of cars, as compared with a year ago and the preceding month:

	November 1929	November 1928	Oct. 1929
Auburn	4	5	17
Black Hawk	1	*	0
Buick	293	558	812
Cadillac	78	66	135
Chevrolet	1,271	987	2,450
Chrysler	57	277	209
Cord	3	*	15
De Soto	64	252	157
Dodge	206	413	188
Durant	51	111	135
Erskine	4	29	10
Essex	393	559	508
Ford	2,472	3,513	4,429
Franklin	4	0	6
Gardner	1	2	3
Graham-Paige	78	180	178
Hudson	175	152	249
Hupp	89	128	249
Jordan	8	13	3
La Salle	67	71	131
Lincoln	9	4	19
Marmon	51	25	34
Marquette	26	*	78
Nash	96	133	195
Oakland	43	435	138
Oldsmobile	99	201	271
Packard	83	118	213
Peerless	8	12	9
Pierce-Arrow	5	3	10
Plymouth	95	229	212
Pontiac	126	832	273
Reo	35	43	81
Roosevelt	8	*	27
Studebaker	48	173	153
Viking	9	*	29
Whippet	58	325	205
Willys-Knight	12	56	32
Miscellaneous	0	33	29
Totals	6,130	9,938	11,893

*Not in production.

FIFTH AVENUE COACH CO. BUYS TERMINAL SITE

New York, Dec. 30.—In preparation for the construction of a motor coach terminal with a capacity of more than 500 motor bus departures daily, the Fifth Avenue Coach Company has acquired title to three parcels of land in West 36th and West 37th Streets, between 5th and 6th Avenues. The land will be used as a site for its subsidiary, the Union Motor Coach Terminal, Inc., successor to the Waldorf-Astoria Motor Coach Terminal.

The parcels are at 59 and 61 West 36th St. with a forty-five foot frontage on that street, and at 58 and 60 West 37th Street, immediately in the rear. Three buildings now occupy the property. They will be remodeled to provide for the terminal. The properties were owned by the 59-61 West 36th Street Corporation.

WILL BUY 12 BUSES

Buffalo, Dec. 30.—Directors of the London (Ontario) Street Railway Company have authorized the purchase of twelve additional buses, which it will add to its fleet in 1930.

GLIDDEN BUICK OBSERVES ITS TWENTIETH BIRTHDAY

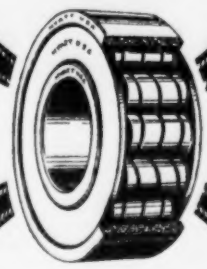
New York, Dec. 30.—Making its advent in the infancy of the automobile industry and expanding in keeping with the industry's growth, Glidden Buick Corporation celebrated this month its twentieth anniversary. From its first quarters, barely large enough to hold two cars, the firm has experienced marked growth. Today, the concern's facilities include two large Broadway sales locations, two big service stations in Manhattan and a sales and service unit in Newark, N. J. Fred L. Yarrington is general manager.

WILL MOVE BUS TERMINAL

Goldsboro, N. C., Dec. 30.—The union bus station at Goldsboro will on January 1 be moved from its present location on Walnut and George Streets to the building on Center and Mulberry Streets formerly occupied by the S. & L. Tire Company. There are suitable rest rooms and storage room for about fifteen buses, according to G. Irby Holmes, manager of the bus terminal.

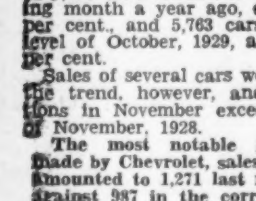
HYATT

QUIET



ROLLER BEARINGS

in transmissions
HYATT
is another word for *Quiet!*



BEAR SYSTEM

Axle and Wheel Alignment

Free exhibition and demonstration at the

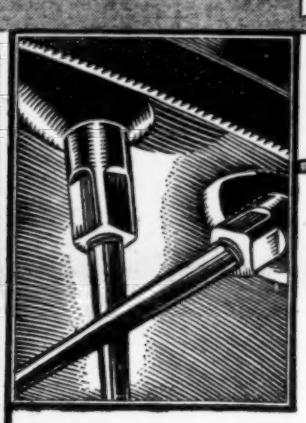
AUTO SHOW

Space D122-3—4th Floor

showing how to correct the *cause* of shimmy, hard steering, and abusive tire wear.

JOBBERS: Be sure all your road men see this exhibit.

THOUSANDS OF PEOPLE WILL *"look for the* NIPPLE"



... BEFORE THEY DECIDE

Will they see it on your car?

If it hasn't a NIPPLE it isn't a "TORRINGTON" Swaged Spoke

SPOKES are in the spotlight. That is, the Tension Nipple, Swaged Spoke which is responsible for the great and growing popularity of wire wheels.

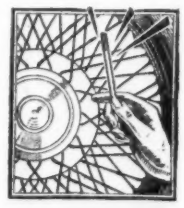
The public are interested. Their preference is for beauty and more beauty in motor cars, for assurance of extra strength and comfort—which the Tension Nipple, Swaged Spoke gives.

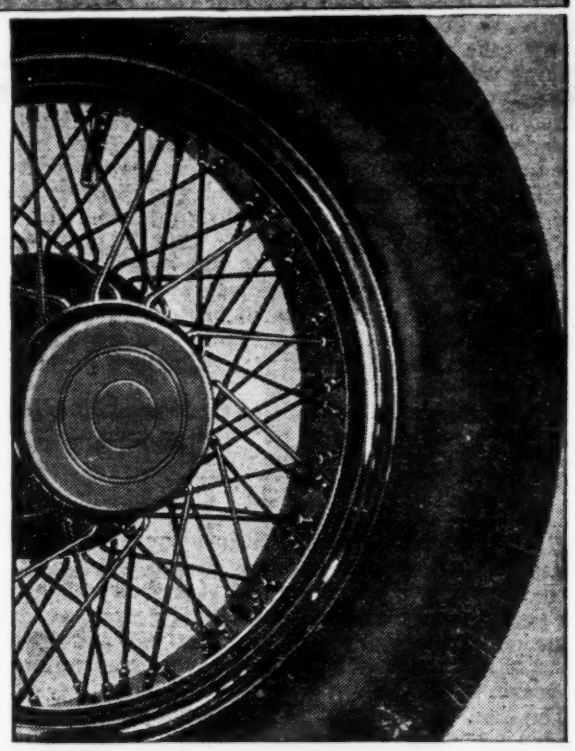
The industry is interested because the Tension Nipple, Swaged Spoke wire wheel is a new and potent sales advantage.

Only the Nipple and the Swaged Spoke give an adjustable, even tension wheel—the smart wire wheel, for only Swaging can draw and shape these spokes of tough steel into a variety of graceful forms. And Swaging gives a smooth, hard, even surface which takes any finish perfectly.

The Nipple identifies the genuine Swaged Spoke. It is itself a vital feature in the superiority of this spoke, for the Nipple is a threaded nut which securely locks, or 'anchors', the spoke to the rim.

The wire wheel with Tension Nipple, Swaged Spokes adds extra value to a car—helps put it in the preferred class. Advertising in The Saturday Evening Post is prompting the public to "Look for the Nipple"—if they see it on your car, you have an extra sales advantage.





Make This Simple Test

Tap the spokes of a wire wheel sharply with a pencil. If each spoke of the same length in the wheel gives the same tone response, the tension on all is uniform. But if some spokes "zing", and others "zong", there is varied tension and the wheel may not run true. Wheels built with the Nipple *can* be adjusted quickly so that ALL spokes have the exact same tension.

What Swaging Does for Spokes

1—Increases the tensile strength of steel. 2—Refines the grain of the steel. 3—Makes the steel uniformly hard. 4—Gives them their design or shape—tapered, for instance. 5—Increases flexibility. 6—Creates a smooth, hard, even surface to take any finish perfectly.

The Torrington Company
ESTABLISHED 1866
Torrington, Conn., U.S.A.
Specialists in the manufacture of precision products such as Swaged Spokes and Nipples, Ball Bearings, etc.

Torrington
SWAGED SPOKES

Automotive Daily News

"Of, By and For the Entire Automotive Industry"

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Buying From Income

IN a recent address Thomas MacDonald, chief of the Bureau of Public Roads, called attention to the fact that bond issues by the states for purposes of highway development are profitable investments.

"There is not a single valid argument against the issuance of bonds for road improvement as a fiscal matter," says Mr. MacDonald. The issuance of road bonds intelligently and scientifically adjusted to the needs of the state, is the only way public credit can be exchanged for physical properties, better roads among them, which are income-producing and which do have the ability to pay for themselves."

Few people will deny the validity of Mr. MacDonald's argument and while they may not realize it, the statement applies to far wider forms of credit than state bond issues. As a matter of fact American life today is prosperous because we have as a nation already given our assent to the idea of exchanging credit for physical properties.

In a recent canvass conducted by the Department of Commerce it was found that 45 per cent. of all the families interviewed were purchasing something on the installment plan. The purchases included motor cars, sewing machines, furniture, radios and a hundred other physical properties. In every case the family had pledged its credit to acquire something which would make it more efficient or happier.

Whatever fault may have been found in the past with deferred payment purchasing, it was the execution and not the fundamental idea that called for reprobation. In speaking of bond issues, Mr. MacDonald says that they are beneficial if they are "intelligently and scientifically adjusted to the needs of the state." In pledging its credit for the acquirement of physical properties that it may need, the family will benefit if it does the job intelligently. If the state puts out an issue of highway bonds larger than its credit or its needs indicate, it will suffer by just the amount of its over-optimism. If the family ties up an excessive portion of its income in deferred-payment purchases, its economic condition will suffer.

In the automobile field deferred payment buying is a vitally important part of the sales campaign. It is not an excessive percentage of the whole.

If

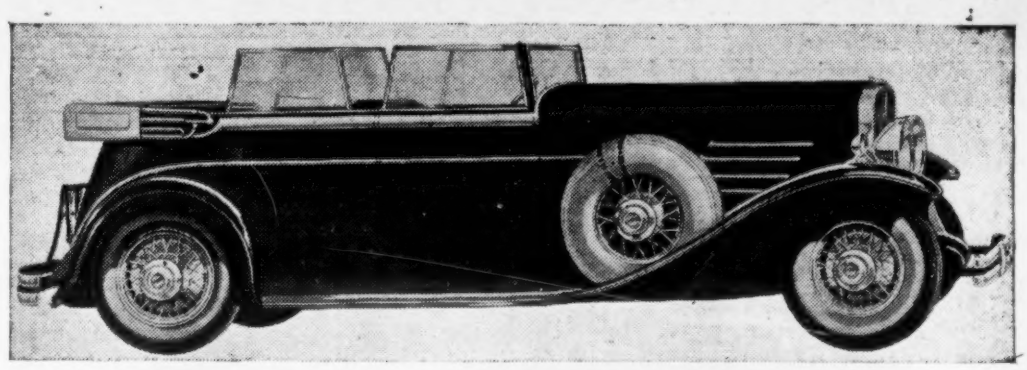
LOOKING back at the late volcanic eruption in the securities market, it is interesting to speculate what would have happened if the cyclone had struck fifteen or twenty years ago. As a matter of fact similar cyclones did visit the market of those days and many of us have vivid recollections of the panic of 1907 and some lesser visitations of later years.

The fact is that during the past few years we have made basic changes in our economic and commercial structure. It was these changes that enabled us to weather the recent market storm without the widespread business depression that followed other slumps in the past.

To begin with, our banking operations are now under the control of the Federal Reserve, which can function to its best advantage in just the situation that recently existed. Another factor that helped avert disaster is the habit of close buying that has recently grown up in this country. The wholesale and retail trade alike buy "from hand to mouth" as the phrase has it. That is exaggeration, but merchants generally do buy less at a time and more often than they used to do. The result was that inflated inventories played no part in the market crisis. But more than all there is a truer understanding on the part of big business of what causes depression, and once the cause was fixed cure was not so difficult.

Today business generally is looking forward to 1930 with renewed confidence that may bring a number of pleasant surprises before many months have passed.

View of Franklin Offerings for 1930



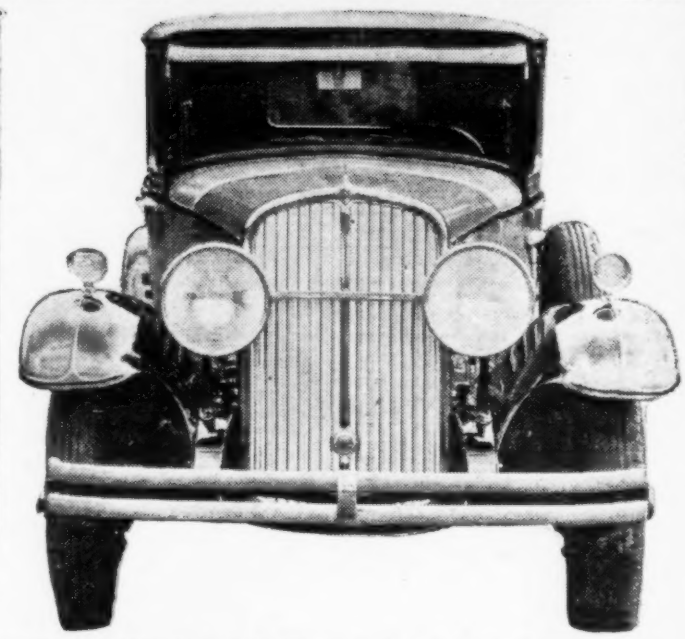
AIRPLANE ENGINE IN NEW FRANKLINS

(Continued from Page 1)

new features as the concealed running boards, deep cut doors, horizontal dart louvres, original treatment of windows, moldings and panelings, and the rakish slant of the windshield definitely place these new Franklin types in a conspicuous position in the fine car field. The Speedster and the two Pirate models will be on the 132-inch chasis, while the Pursuit will be on the 125-inch chassis.

Two outstanding sedan types are also among the new 1930 offerings. The Club Sedan is a striking piece of coachwork and is mounted on the 125-inch wheelbase. Its close-coupled four-door body gives it a

(Continued on Page 9)



AT THE TOP—One of the Pirate models in the new Franklin line, which is outstanding in its design. This car is highly streamlined to provide minimum wind resistance as well as to enhance its beauty. Note that the running boards are entirely concealed by the side sections which slope out gradually to the edge. BELOW—Front view of the 1930 air-cooled Franklin shows the smart new design of the hood and front. The shutters used in front are thermostatically controlled

COMING EVENTS

JANUARY

1-18—Milwaukee, Wis. Automobile show.
4-11—New York. National Automobile Show.
6-11—East Orange, N. J. Orange and Maplewood Automobile Show.
8-11—Flint, Mich. Automobile show.
9 —New York. Society of Automotive Engineers' Annual Dinner.
11-18—Atlantic City, N. J. American Road-builders' Association Convention.
11-18—Philadelphia, Pa. Automobile show.
11-18—Buffalo, N. Y. Automobile Dealers' Association Show, 174th Regiment Armory.
11-18—Newark, N. J. Automobile Trade Association Annual Show.
11-18—Milwaukee, Wis. Automobile show.
12-18—Cincinnati, O. Automobile show.
14-17—Lexington, Ky. Automobile show.
18-25—Baltimore, Md. Automobile show.
18-25—Brooklyn, N. Y. Motor Vehicle Dealers' Association Automobile Show.
18-25—Harrisburg, Pa. Annual Automobile Show of the Harrisburg Automotive Trade Association.
18-25—Hartford, Conn. Automobile show.
18-26—Pittsburgh, Pa. Automobile show at Motor Square Garden.
18-25—Montreal, Canada. Automobile Trade Association National Eastern Canadian Motor Show.
18-25—Louisville, Ky. Automobile show.
18-26—Boston, Mass. Annual Automobile Show.
18-26—Los Angeles Cal. Seventeenth Annual Automobile Show.
20-25—Huntington, W. Va. Automobile Show.
20-25—Rochester, N. Y. Automobile show
20-25—Springfield, Mass. Automobile show.
21-24—Detroit, Mich. Society of Automotive Engineers' Annual Meeting.
25-Feb. 1—Chicago. National Automobile
25-Feb. 1—Washington, D. C. Automobile Show.
25-Feb. 1—Cleveland, O. Show at Public Auditorium, auspices of Cleveland Automobile Manufacturers and Dealers' Association.
25-Feb. 2—Copenhagen, Denmark. Motor show.
27-28—Chicago. National Automobile Dealers' Association Convention.
27-Feb. 1—Portland, Me. Automobile Show.
27-Feb. 1—Wilkes-Barre, Pa. Automobile show.
27-Feb. 4—Jersey City, N. J. Hudson County Automobile Dealers' Show.
29-31—Cleveland, O. Ohio Association of Commercial Haulers' Convention.
29-Feb. 1—New Haven, Conn. Automobile show.

FEBRUARY

1- 8—Minneapolis-St. Paul. Automobile show.
1- 8—San Francisco. Pacific Automobile show at Civic Auditorium.
3- 8—Cumberland, Md. Automobile show.
3- 8—Ottawa, Canada. Motor show.
3- 8—Syracuse, N. Y. Automobile Show.
3- 8—Toledo, O. Automobile show.
3- 8—Wichita, Kan. Automobile show.
4- 8—Peoria, Ill. Automobile show.
4- 9—St. Louis, Mo. Automobile Show.
8-15—Los Angeles, Cal. Automobile Salon.
8-15—Kansas City, Mo. Automobile show.
8-15—Allentown, Pa. Lehigh Auto Trade Association Automobile Show.
8-15—Columbus, O. Automobile Show.
10-15—Indianapolis. Automobile show.
10-15—Denver, Col. Automobile snow.
10-16—Sheboygan, Wis. Automobile Show.
11-13—Spartanburg, S. C. Automobile Show
12-15—Mankato, Minn. Automobile Show.
13-15—Springfield, Ill. Automobile Show.
15-22—Providence, R. I. Automobile show.
17-22—Omaha, Neb. Automobile Show.
20-22—Holyoke, Mass. Automobile Show.
24-March 1—Camden, N. J. Automobile Show.
24-March 1—Des Moines, Ia. Automobile show.
25-March 2—Seattle, Wash. Automobile show.

MARCH

3- 7—Boston, Mass. Automobile Salon of fine cars.
16-30—Nice, France. Automobile exhibition.

APRIL

12-27—Milan, Italy. Italian International Automobile Show.

A
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Note how the metal fills the interstices of the cable, forming a grip that cannot loosen regardless of the strain put on the fitting.
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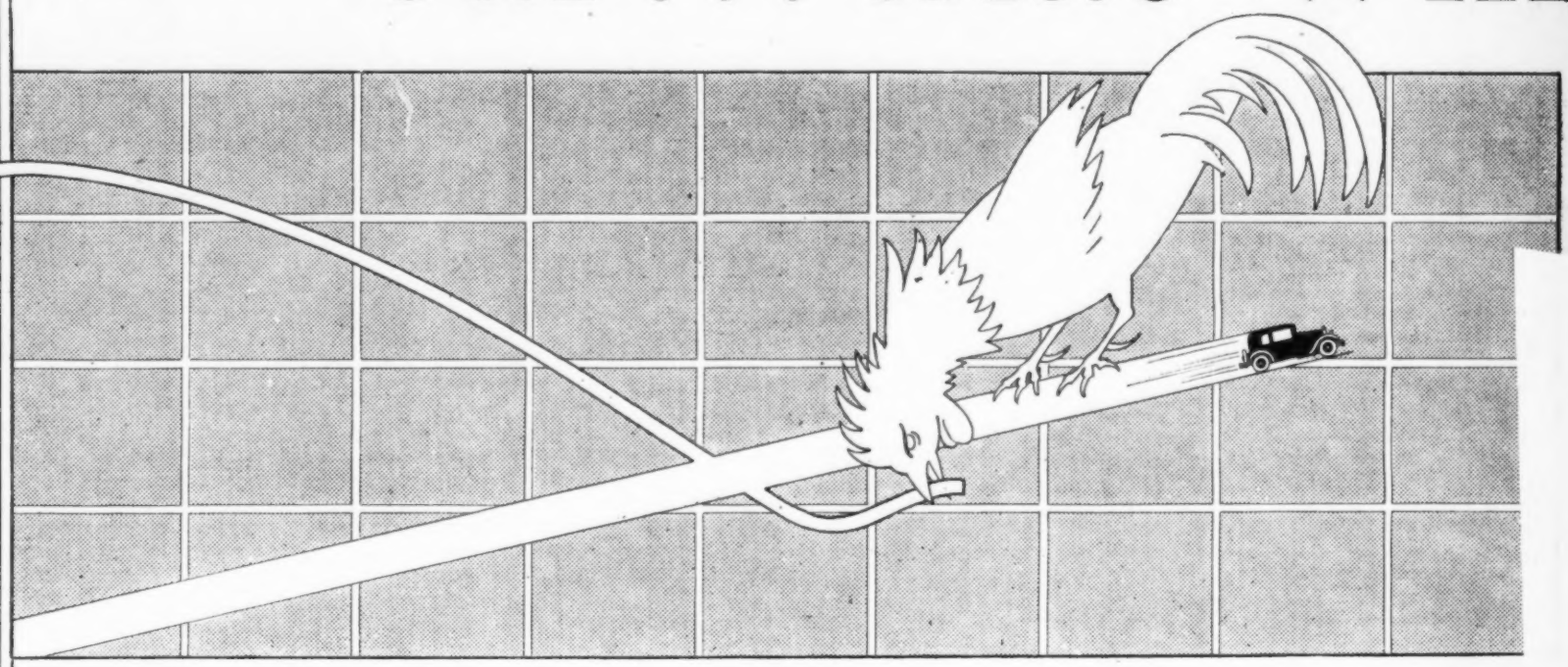
AMERICAN AUSTIN

the bantam-car...that will



fight the 1930 sales problem~

Look over the 1930 sales situation.

1. Economy is the fashion of the day. Here's a car that costs less than $450 and can be run 10,000 miles on $56 worth of gas and oil—the American Austin.

2. Used cars are a glut on the market. Here's a car that can be sold to thousands of American families as a second car, because it costs so little to buy and to run, and will thus avoid trade-ins—the American Austin.

3. Traffic is crowded and parking space is scarce. Here's a car that will do over fifty in high and forty in second, can be parked in a tiny space and be turned completely around in a 32-foot street with a quarter turn of the steering wheel—the American Austin.

4. The demand for smartness and reliability is as great as ever. The American Austin chassis is a duplicate of the Austin of international fame, winner of 450 cups and medals for performance, while the bodies will be outstandingly smart in design.

Every part of the American Austin will be made in America by American workmen, financed and controlled by American capital. It will soon be in production. Do not fail to see the special dealer showing at the Hotel Shelton during the New York Automobile Show.

PRE-SHOWING FOR THE TRADE

HOTEL SHELTON,* N. Y. SHOW WEEK

*Across Lexington Ave. from the show, at 49th Street

AMERICAN AUSTIN CAR CO., INC., 7300 WOODWARD AVE., DETROIT, MICH.

THE AMERICAN *Austin*

DURING THE SHOW

"An Address of Distinction"

THE VANDERBILT HOTEL

34th St. at Park Ave., N.Y.

FAR enough from the hustle and bustle to let you really rest, but so conveniently located that you can reach the show in a few minutes.

An atmosphere that fairly tingles with the important things of life, yet, withal, you feel the easy cosmopolitan sociability that prevails where experienced travelers get together.

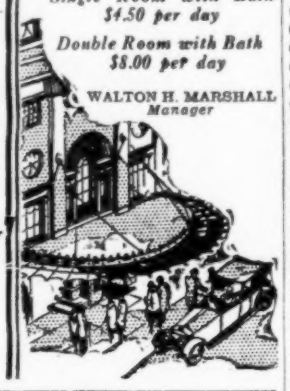
A world-famous cuisine, served just the right way, will make your meals a pleasure. All rooms are outside rooms, and each one has a private bath.

Tariff

Single Room with Bath $4.50 per day

Double Room with Bath $8.00 per day

WALTON H. MARSHALL Manager



MAJOR SPECIFICATIONS AND MECHANICAL DETAILS

Make and Model	Weight—5-P. Sedan	Wheel Base	Engine Make	Fan Belt Type	Thermostat Used	Type	Cylinders	Bore and Stroke	Piston Disp.	Compression Ratio	Tax H. P.	Brake, H. P. and Peak R. P. M.	Pist. Make or Mat	No. Main Br.	Oil Purifier	Fuel Clean'r	Carburetor	Air Cleaner
Auburn 6-80	3255	120	Lyc	V	Yes	L	6	2⅞x4¾	185	*5.16	19.8	65@3400	Alum*	4	—	—	Sch	—
Auburn 8-90	3510	125	Lyc	V	Yes	L	8	2⅞x4¾	246	*5.15	26.4	93@3300	Alum*	5	Pur	AC	Sch	—
Auburn 120	3908	130	Lyc	V	Yes	L	8	3¼x4½	299	*5.25	33.8	125@3600	Alum*	5	Pur	AC	Sch	—
Blackhawk 6	4320	127½	Own	V	Bish-Bab	H	8	3⅜x4½	241.5	*5.0	27.3	85@3150	Alum*	7	Wal	AC	Zen	AM
Blackhawk 8	4185	127½	Own	V	Bish-Bab	L	6	3 x4¾	268.5	5.50	28.8	88@3200	Alum*	5	—	AC	Zen	AM
Buick 47	3700	118	Own	V	Bish-Bab	H	6	3 7/16x4⅝	257	4.7	28.36	80½@2800	CI	4	AC	AC	Mar	AC
Buick 57 and 61	4235	124-132	Own	V	Bish-Bab	H	6	3¾x5	331	4.35	33.75	98@2800	CI	4	AC	AC	Mar	AC
Cadillac 353	5040	140	Own	V	———	LV	8	3⅜x4 13/32	353	—	36.45	95@3000	CI	3	AC	Gas	Own	—
Chevrolet Six	2585	107	Own	V	Yes	H	6	3 1/16x3¾	194	5.01	26.3	46@2600	CI	3	—	AC	Car	AC
Chrysler Imp. 80	4120	*204½	Own	V	Yes	L	6	3⅝x5	309.3	*4.7	31.54	100@3200	Alum*	7	Pur	Gas	Str	AM
Chrysler 77	3770	177½	Own	V	Yes	L	6	3⅜x5	268.4	—	27.34	93@3200	Alum*	7	Pur	AC	Str	Un
Chrysler 70	3435	*168½	Own	V	Yes	L	6	3 1/16x4¾	218.6	—	23.43	75@3200	Alum*	7	Pur	AC	Str	Un
Chrysler 66	2850	*163¼	Own	V	———	L	6	3 1/16x4¼	195.6	—	23.43	65@3200	——	7	—	AC	—	—
Cord Front Drive	4530	137½	Lyc	V	———	L	8	3¼x4½	298.6	5.25	33.8	125@3600	Alum*	5	Pur	AC	Sch	—
De Soto	2645	*169	Own	V	Yes	L	6	3 x4½	174.9	*5.2	21.6	55@3400	Alum*	4	Pur	—	Str	—
Dodge Six	2900	112	Own	V	Bish-Bab	L	6	3⅜x3⅞	208	5.18	27.3	58@3000	Alum*	7	Pur	AC	Str	Han
Dodge Senior	3572	120	Own	V	———	L	6	3⅜x4½	241.5	5.5	27.3	78@3000	Alum*	7	Pur	Yes	Str	Un
Durant 40	2395	107	Con	F	———	L	4	3⅜x4¼	152	4.23	18.2	36@2400	Alum*	3	—	—	Til	—
Durant 60	2630	109	Con	F	Bish-Bab	L	6	2⅞x4¾	185	5.44	19.8	43@2800	Alum*	4	H-W	—	Til	—
Durant 66	2755	112	Con	F	Bish-Bab	L	6	2⅞x4¾	185	5.44	19.8	43@2800	Alum*	4	H-W	Til	Til	Til
Durant 70	3100	119	Con	V	Bish-Bab	L	6	3⅜x4⅝	248.3	5.1	27.3	70@3000	Alum*	7	H-W	Til	Til	Own
Elcar 6-75	2942	117	Lyc	V	Yes	L	6	2⅞x4¾	185	5.25	19.8	61@3000	Alum*	4	Yes	Gas	Sch	—
Elcar 8-95-96	3299	123	Lyc	V	Yes	L	8	2⅞x4¾	246.7	5.25	26.5	90@3000	Alum*	5	—	Gas	Sch	—
Elcar 8-130	3780	130	Lyc	V	Yes	L	8	3⅜x4½	322	5.25	33.8	140@3300	Alum*	5	Pur	Gas	Sch	—
Erskine Six	2600	109	Con	V	———	L	6	2¾x4½	160	4.87	18.15	43@3000	CI	4	Han	Ste	Sch	—
Essex Challenger	2660	110½	Own	V	———	L	6	2¾x4½	161.4	5.7	18.27	55@3600	Alum	3	—	Ste	Mar	AC
Ford	2336	103½	Own	V	———	L	4	3⅞x4¼	200.5	4.22	24.03	40@2200	*See Note	3	—	AC	Zen	—
Franklin 130	3695	120	Own	—	———	*H	6	3¼x4¾	236	4.78	25.3	50@2500	Alum	7	AC	AC	Str	Un
Franklin 135-137	*3865	125-132	Own	—	———	*H	6	3½x4¾	274	4.68	29.4	60@2500	Alum	7	AC	AC	Str	Un
Gardner 136	3410	122	Lyc	V	Yes	L	6	2⅞x4¾	185.7	*5.0	19.8	70@3500	Alum*	5	—	Gas	Sch	—
Gardner 140	3520	125	Lyc	V	Yes	L	8	2⅞x4¾	246.6	*5.05	26.5	90@3300	Alum*	5	Pur	Gas	Sch	AM
Gardner 150	3895	130	Lyc	V	Yes	L	8	3¼x4½	298.6	*5.25	33.8	126@3300	Alum*	5	Pur	Gas	Sch	AM
Graham-Paige 612	3035	115	Own	F	Yes	L	6	3⅛x4½	207.3	5.15	23.4	66@3000	Alum*	7	—	AC	Joh	AC
Graham-Paige 615	3220	115	Own	F	Yes	L	6	3¼x4½	224	5.51	25.35	76@3200	Alum*	7	AC	AC	Joh	AC
Graham-Paige 621	4035	121	Own	F	Yes	L	6	3½x5	288	5.35	29.4	97@3200	Alum*	7	AC	AC	Joh	AC
Graham-Paige 827	4205	127	Own	F	Bish-Bab	L	8	3⅜x4½	322	5.54	36.45	120@3200	Alum*	5	AC	AC	Joh	AC
Graham-Paige 837	4405	137	Own	F	Bish-Bab	L	8	3⅜x4½	322	5.54	36.45	120@3200	Alum*	5	AC	AC	Joh	AC
Greater Hudson	3785	†121 7/16	Own	V	———	F	6	3½x5	288	6.1	29.4	92@3200	Alum	4	—	Ste	Mar	AC
Hupmobile A	3040	114	Own	V	Bish-Bab	L	6	3¼x4¼	211.5	4.8	25.4	— ——	CI	4	Pur	Gas	Str	Han
Hupmobile C	3579	121	Own	V	Bish-Bab	L	8	3 x4¾	268.6	5.05	28.8	100@3200	CI	5	Han	Gas	Str	—
Hupmobile S	——	111	Own	—	Yes	L	6	3¼x4¼	211.6	—	25.35	70@3200	Own CI	4	Pur	Ste	Str	Han
Jordan E	3400	116	Con	V	Bish-Bab	L	6	3⅜x4⅝	248.3	5.16	27.4	70@3000	Alum*	7	Yes	AC	Str	Yes
Jordan G	3790	125	Con	V	Pines	L	8	3 x4¾	268.9	5.11	28.9	85@3200	Alum*	5	Yes	Ste	Str	AC
Kissel 6-73	3260	117	Own	V	Fulton	L	6	2⅞x4¾	185	5.15	19.8	70@3400	Alum	4	AC	Gas	Sch	AC
Kissel 8-95	3597	125	Own	V	Fulton	L	8	2⅞x4¾	246.7	5.15	26.5	90@3200	Alum	5	AC	AC	Sch	AC
Kissel 8-126	4444	132-139	Own	V	Fulton	L	8	3¼x4½	298	5.3	33.8	126@3300	Alum*	5	AC	AC	Sch	AC
La Salle 340	4520	125-134	Own	V	———	LV	8	3 1/16x4 13/32	340	—	35.1	90@3000	CI	3	AC	Gas	Own	—
Lincoln 8	5010	136	Own	V	———	L	8	3½x5	384	4.8	39.2	90@2800	Alum	5	—	Own	Str	Un
Marmon 68	2897	114	Own	V	Yes	L	8	2 13/32x4¼	211	5.25	25.3	76@3200	Per	5	AC	AC	Str	AC
Marmon 78	3182	120	Own	V	Yes	H	8	2 13/32x4	217	5.50	27.6	86@3400	Per	5	AC	AC	Str	AC
Marmon Big 8	——	*202	Own	V	Pines	L	8	3¾x4¾	315.2	5.50	33.8	125@3400	Per	5	AC	AC	Sch	AC
Marquette Six	2925	114	Own	V	Yes	L	6	3⅛x4⅝	220	5.2	23.4	68@3000	CI	4	AC	AC	Mar	AC
Nash Single 6	2760	114¼	Own	V	Pines	L	6	3⅛x4⅝	201.3	5.0	23.4	60@2800	Alum*	7	AC	AC	Car	AC
Nash Twin Ig. 6	3535	118-128¼	Own	V	Pines	H	6	3⅜x4½	242	5.0	27.3	74½@2800	Alum*	7	AC	AC	Mar	AC
Nash Twin Ig. 8	4050	124-133	Own	V	Pines	H	8	3¼x4½	298.6	5.25	33.8	100@3200	Alum*	9	AC	AC	Mar	AC
Oakland All-Am.	3185	117	Own	V	†Bish-Bab	L	6	3⅜x4¼	228	4.9	27.3	68@3000	S St	4	AC	AC	Mar	AC
Oldsmobile	2930	113½	Own	V	———	L	6	3 7/16x4⅛	197.5	5.2	24.4	65@3000	CI	4	AC	AC	Sch	AC
Packard 7-40-45	*4560	140½-145½	Own	*V	Pines	L	8	3½x5	384.8	—	39.2	106@3200	Alum	9	—	—	—	—
Packard 7-26-33	*4265	127½-134½	Own	*V	Pines	L	8	3 1/16x5	320	—	32.5	90@3200	Alum	9	—	—	—	—
Peerless 6-61	3025	116	Con	V	Bish-Bab	L	6	3⅜x4	214.7	5.06	27.3	62@3000	Alum	7	Yes	AC	Str	AC
Peerless 6-81	3290	116	Con	V	Bish-Bab	L	6	3¼x4⅝	248	5.06	27.3	63@2600	Alum*	7	Pur	AC	Str	AC
P'rce-Ar'w 133-43	*4550	133-143	Own	V	———	L	8	3½x4¾	366	5.0	39.2	125@3200	Alum*	9	Han	AC	Str	AM
Plymouth	2465	*169	Own	V	———	†L	4	3⅝x4¼	175.4	4.6	21.03	45@2800	Alum	3	—	—	Car	Un
Pontiac Big Six	2840	110	Own	V	Yes	L	6	3 1/16x3⅞	200	4.9	26.3	57@3000	S St	3	—	AC	Mar	—
Reo F. C. Mate	3280	115	Con	V	Yes	L	6	3⅜x4	214.7	5.5	27.3	60@2800	Alum*	7	—	AC	Sch	Un
Reo F. C. Master	3645	121	Own	V	Bish-Bab	L	6	3⅜x5	268.3	5.3	27.3	80@3200	Alum	7	Han	AC	Sch	Un
Roosevelt	2950	*172	Own	V	Yes	L	8	2¾x4¼	201.9	5.25	24.2	72@3200	Per	7	—	—	Str	—
Ruxton Fr'nt Dr'v	4000	130	Own	V	Yes	L	8	3 x4¾	268.6	5.09	28.8	100@3200	Alum*	5	Pur	AC	Zen	AM
St'ns-K. M N 6-80	4078	126-134	Own	V	———	K	6	3⅜x4¾	255	5.0	27.3	70@3200	Alum*	7	Ski	Til	Til	Til
St'ns-K.de l. H8-90	5100	137	Own	V	———	K	8	3½x5	385	5.0	39.2	120@2800	CI	9	Ski	AC	Til	Til
St'ns-K. de l. J8-90	*5265	145	Own	V	———	K	8	3½x5	385	5.0	39.2	120@2800	CI	9	Ski	AC	Til	Til
Studebak'r Dict. 6	3080	115	Own	V	Yes	L	6	3⅜x4⅛	221.4	4.8	27.0	68@3200	CI	4	Pur	AC	Str	—
Studebak'r Dict. 8	3095	115	Own	V	Yes	L	8	3 1/16x3¾	221	5.15	30.0	70@3200	CI	9	Pur	AC	Str	—
Studebak'r Com. 6	3235	120	Own	V	Yes	L	6	3⅜x4⅝	248.3	*4.8	27.3	75@3000	CI	4	Han	AC	Str	—
Studebak'r Com. 8	3255	120	Own	V	Yes	L	8	3 1/16x4¼	250.4	*5.1	30.0	80@3600	Alum*	9	Han	AC	Str	AM
Studebak'r Pres't	*4045	125-135	Own	V	Yes	L	8	3½x4⅜	337	*5.1	39.2	115@3200	Alum*	5	Han	AC	Str	AM
Stutz M	4718	134½-145	Own	T C	Bish-Bab	H	8	3¼x4½	322	5.25	36.5	113@3300	Alum*	9	Wal	Gas	Zen	AM
Viking 8	3650	125	Own	V	Fulton	LV	8	3⅜x3⅝	259.5	5.1	36.5	80@3000	CI	3	—	AC	Joh	AC
Windsor 6-69	3195	120	Con	V	Yes	L	6	2⅞x4¾	185	4.78	19.8	47.5@2600	Alum*	4	AC	—	Str	—
Windsor 6-72	2930	120	Con	V	Yes	L	6	3⅜x4	215	4.94	27.3	66@3200	Alum*	7	AC	—	Str	—
Windsor 6-77	2930	120	Con	V	Yes	L	6	3⅜x4	215	4.94	27.3	66@3200	Alum*	7	AC	—	Str	—
Windsor 8-82	3600	125	Con	V	Yes	L	8	3 x4¾	269	5.0	28.8	88@3200	Alum*	5	AC	Gas	Str	AM
Windsor 8-92	3600	125	Con	V	Yes	L	8	3 x4¾	269	5.0	28.8	88@3200	Alum*	5	AC	Gas	Str	AM
Whippet Four	2383	103¼	Own	V	———	L	4	3⅛x4¾	145.7	5.4	15.6	40@3200	Alum**	3	—	—	Til	—
Whippet Six	2678	112½	Own	V	Yes	L	6	3⅛x3⅞	178.3	5.13	23.4	50@3000	Alum**	7	—	Til	Til	Til
Willys-Kn't St'd 6	2858	109½	Own	V	Yes	K	6	2 13/32x3⅞	158	5.5	20.7	45@3000	Alum*	7	Ski	Til	Til	Til
Willys-Kn't 66 B	3934	120	Own	V	Yes	K	6	2⅞x4¾	256	5.5	27.3	72@3200	Alum*	7	Ski	Til	Til	Til
Willys-Kn't 70 B	3020	112½	Own	V	Yes	K	6	2 13/32x4⅜	178	5.5	20.7	53@3000	Alum**	7	Ski	Til	Til	Til

KEY TO ABBREVIATIONS

CHASSIS WEIGHT

All weights are for 5-passenger sedans unless otherwise indicated and given in poands

*FRANKLIN 137—Seven-passenger sedan —4,061.

*PACKARD weights shown are for the five passenger sedans of the 7-26 and 7-40 line. Weight of the five-passenger sedan of the 7-45 series is 4,805. The five-passenger coupe of the 7-33 line weighs 4,255.

*PIERCE-ARROW—Road weight of 5-passenger sedan, 133 series.

*STEARNS-KNIGHT — Seven-passenger sedan.

*Studebaker President weight of 135-inch 5-passenger sedan.

WHEEL BASE

All wheel base lengths are standard, unless otherwise noted, and are given in inches. *Chrysler line shows over all length of car, including bumpers.

*Over all length on De Soto and Plymouth.

*GREATER HUDSON also available on 139-inch wheel base.

ENGINE MAKE

LYC—Lycoming Motors Corporation. CON—Continental Motors Corporation.

FAN BELT TYPE

V—V-Belt. F—Flat. T C—Timing chain. *PACKARD fans are driven by two V-type fan belts in place of a single belt.

THERMOSTAT

*On Marquette of Canada.

†Also uses Dole.

ENGINE TYPE

L—L-head. H—Valve in head. F—F-head. K—Knight sleeve valve. *Air cooled. †Thermos-Syphon. Where reference marks are not used engines have water pump circulation.

COMPRESSION RATIOS

*Other compression ratios available.

PISTON MATERIALS

ALUM—Aluminum. ALUM*—Aluminum with invar strut. ALUM**—Aluminum with invar strut and also without invar strut. S ST—Semisteel. PER—Permite. *Ford using Permite, also aluminum pistons with and without invar strut.

OIL PURIFIERS

PUR—Purolator. A C—A C Spark Plug H W—Rich Tool Company. SKI—Skinner. HAN—Handy. WAL—Wall.

FUEL CLEANERS

A C—A C Spark Plug Company. GAS—Gascolator, Bassick Manufacturing Company. STE—Stewart-Warner. TIL—Tillotson.

CARBURETOR

SCH—Schebler. MAR—Marvel. CAR—Carter. STR—Stromberg. BALL—Ball & Ball. JOH—Johnson. TIL—Tillotson. ZEN—Zenith.

AIR CLEANERS

A C—A C Spark Plug Company. UN—United. TIL—Tillotson. A M—Air Maze. HAN—Handy.

G. M. PLANS SPECIAL NEW YORK SHOWING

(Continued from Page 1)

and eleven commercial cars will be displayed.

Making its formal bow at the showing will be the newest member of General Motors family, the General Motors Day-Fan Radio, displaying a selection of models. Frigidaire also will demonstrate the latest in automatic refrigeration with a dozen models.

The General Motors special showing will occupy not only the grand ballroom and the Laurel and Rose rooms of the Hotel Astor, but the conservatory, reception room and lobby will be filled with examples of the finest and latest in automobiles. The Frigidaire and truck displays will be on the balcony.

The special showing has been planned as a convenient grouping of General Motors products during the automobile show and supplements the General Motors exhibits in Grand Central Palace.

The Hotel Astor exhibition will be under the general direction of a committee consisting of A. D. Farrell, W. E. Fellows, H. J. C. Henderson, J. M. Howard, H. L. Horton, S. P. Landers, E. F. Mauder, W. S. McLean, R. L. Newton, Edson Smith, A. G. Southworth, F. A. Spencer, M. J. Sullivan and W. G. Wright, chairman.

CHEVROLET DEALERS DISCUSS SERVICE

Newark, N. J., Dec. 30.—The importance of adequate service to customers was the chief topic at a dinner of Chevrolet dealers of Essex and Hudson counties in the Newark Athletic Club this week. Speakers included E. R. Lotts, zone manager of Chevrolet Motors Company, and Leon Bard, Eastern service promotion manager of the company.

Walter Van Winkle, service manager for the Foley Chevrolet Motor Sales Company, said that the flat-rate service system, under which the car owners know the cost of a job before it is started, has worked successfully in his organization.

BUS ROUTE EXTENDED

Asbury Park, N. J., Dec. 30.—The Public Utilities Commission has approved an extended route asked for by the Twin City Bus Company and the operation of six buses on the Springwood Avenue route, Asbury Park.

MASSACHUSETTS LICENSE, GAS TAXES $15,620,000

Boston, Mass., Dec. 30.—Motor fees of $6,500,000 and gasoline taxes of $9,120,000 were realized by the state of Massachusetts during the fiscal year just ended, a total of $15,620,000. Motorists used 457,000,000 gallons of taxable gas in eleven months to November 30 and drove nine million miles for every fatal accident, according to motor vehicle registry figures. The largest amount received for gas tax was in August, $54,757, with July the next heaviest and June, third.

OAKLAND PRODUCES 630,000 PONTIACS IN FOUR YEARS

Detroit, Dec. 30.—Oakland Motor Car Company has built 630,000 Pontiac sixes since the car was introduced in January, 1926.

OF PRESENT AMERICAN PASSENGER CAR MODELS

Make and Model	Front End Drive	Ignition System	Gen. and Starter	Clutch	Gear Set	Universals	Rear Axle	Ratio	Brakes	Steering Gear	Rear Springs	Spring Shackles	Chassis Lubric.	Tires
Auburn 6-80	Link	Del-R	*Del-R	Long	War-G	Un P	Col ½	4.9	H	Ross	Semi 56¾	Own	Bijur	18x5.50
Auburn 8-90	Link	Del-R	*Del-R	Long	War-G	Un P	Col ½	4.7	H	Ross	Semi 56¾	Own	Bijur	18x6.00
Auburn 120	Link	Del-R	*Del-R	Long	Detr	Un P	Col ½	4.45	H	Ross	Semi 56¾	Own	Bijur	18x6.50
Blackhawk 6	Link	Del-R	Del-R	Borg	†*Detr	Un P	Sal ½	4.75	H	Gem	Semi 60	Own	Bijur	31x6.00
Blackhawk 8	Link	Del-R	*Del-R	Borg	†*Detr	Un P	Sal ½	†4.75	H	Gem	Semi 60	Own	Bijur	31x6.00
Buick 47	Tex	Del-R	Del-R	Own	Own	Own	Own ¾	4.545	M	Sag	Semi	Own	Al-Z	29x5.50
Buick 57 and 61	Tex	Del-R	Del-R	Own	Own	Own	Own ¾	4.273	M	Sag	Semi	Own	Al-Z	31x6.50
Cadillac 353	Morse	Del-R	Del-R	Own	Own	Spicer	Own ¾	——	M	Sag	Semi 60	Own	Alem	19x7.00
Chevrolet Six	——	Del-R	*Del-R	Own	Own	Own	Own ½	3.8	M	Own	Semi 54	Own	Alem	20x4.50
Chrysler Imp. 80	Morse	Del-R	Del-R	Own	Own	Un P	Own ½	†4.45	H	Ross	Semi 58⅜	Rub B	Al-Z	18x7.00
Chrysler 77	Morse	Del-R	Del-R	Own	Own	Un P	Own ½	3.82	H	Ross	Semi 58	Rub B	Al-Z	18x6.00
Chrysler 70	Morse	Del-R	Del-R	Own	Own	Un P	Own ½	4.10	H	——	Semi 57¾	Rub B	Al-Z	18x5.50
Chrysler 66	Morse	Del-R	Del-R	Own	Own	Un P	Own ½	4.70	H	——	Semi 54¾	Sil B	——	18x5.50
Cord Front Dr.	Link	Del-R	Del-R	Long	Detr	Un P	*Col ¾	4.41	H	Gem	Semi 62	Own	Bijur	18x7.00
De Soto	Morse	N. E.	*N E	Borg	Own	Un P	Own ½	4.7	H	War	Semi 53½	Tryon	Al-Z	19x5.00
Dodge Six	Morse	N. E.	*N E	Borg	Own	Spicer	Own ½	4.72	H	Gem	Semi 54	Own	Al-Z	19x5.50
Dodge Senior	Morse	N. E.	*N E	Borg	Own	M M	Own ½	4.45	H	Gem	Semi 55½	Own	Al-Z	19x6.00
Durant 40	Morse	Aut-L	*Aut-L	Own	Own	Spicer	Own ½	4.44	Bendix	Own	Semi 53¾	Tryon	Alem	28x4.75
Durant 60	Morse	Aut-L	*Aut-L	Own	Own	Spicer	Own ½	4.44	Bendix	Own	Semi 53¾	Tryon	Alem	29x5.00
Durant 66	Morse	Aut-L	*Aut-L	Own	*Own	Spicer	Own ½	3.9	Bendix	Own	Semi 54	Tryon	Alem	29x5.00
Durant 70	Morse	Aut-L	*Aut-L	Own	*Own	Spicer	Own ½	3.72	Bendix	Own	Semi 54	Tryon	Alem	29x5.50
Elcar 6-75	Link	Del-R	*Del-R	Long	War-G	Spicer	Sal ½	——	H	Ross	Semi 53½	Belf	Alem	29x5.00
Elcar 8-95-96	Link	Del-R	*Del-R	Long	‡War-G	Spicer	Sal ½	——	H	Ross	Semi 56	Belf	Alem	29x5.50
Elcar 8-120	Link	Del-R	*Del-R	Long	*War-G	Spicer	Sal ½	——	H	Ross	Semi 57½	Belf	Oil C	30x7.00
Erskine Six	Morse	Del-R	*Del-R	Long	War-G	Spicer	Tim ½	4.78	Bendix	Gem	Semi 52	Own	Al-Z	20x4.75
Essex Challenger	Morse	Aut-L	*Aut-L	Own	Own	Spicer	Own ½	5.6	Bendix	Gem	Semi 54⅞	Own	Alem	30x5.00
Ford	Cel	Own	*Own	Own	Own	Own	Own ¾	3.7	M	Own	Tr Semi	Own	Al-Z	30x4.50
Franklin 130	Ram	Del-R	*Del-R	Brn-L	Detr	Spicer	Own ½	4.54	H	Ross	El 38	None	Al-Z	19x6.00
Franklin 135-137	Ram	Del-R	*Del-R	Brn-L	War-G	Spicer	Own ½	4.73	H	Own	El 38	None	Al-Z	19x6.50
Gardner 13o	Link	Del-R	*Del-R	Borg	War-G	Spicer	Col ½	4.9	H	Ross	Semi 54	Own	Alem	29x5.50
Gardner 140	Link	Del-R	*Del-R	Borg	War-G	Spicer	Col ½	4.9	H	Ross	Semi 54	Own	Alem	31x6.00
Gardner 150	Link	Del-R	*Del-R	Borg	War-G	Spicer	Col ½	4.45	H	Ross	Semi 57	Own	Alem	30x6.50
Graham-Paige 612	Link	Del-R	*Del-R	Long	War-G	Un P	Cla ½	4.7	H	Ross	Semi 54	Tryon	Al-Z	19x5.25
Graham-Paige 615	Link	Del-R	*Del-R	Long	*War-G	Un P	Sal ½	3.9	H	Ross	Semi 58	Tryon	Al-Z	19x5.50
Graham-Paige 621	Link	Del-R	Del-R	Long	*War-G	Un P	Cla ½	3.6	H	Ross	Semi 58	Own	Bijur	19x6.00
Graham-Paige 827	Link	Del-R	Del-R	Long	*War-G	Un P	Cla ½	3.6	H	Ross	Semi 58	Own	Bijur	19x6.50
Graham-Paige 837	Link	Del-R	Del-R	Long	*War-G	Un P	Cla ½	3.9	H	Ross	Semi 58	Own	Bijur	19x6.50
Greater Hudson	Morse	Aut-L	Aut-L	Own	Own	Spicer	Own ½	†4.45	Bendix	Gem	Semi 57¼	Own	Alem	31x6.00
Hupmobile A	Morse	Aut-L	*Aut-L	Borg	Detr	M M	Own ½	4.73	S	Ross	Semi 54	Own	Alem	29x5.50
Hupmobile C	Morse	Aut-L	*Aut-L	Long	Detr	Un P	Own ½	4.36	S	Ross	Semi 54	Own	Alem	31x6.00
Hupmobile S	Morse	Aut-L	*Aut-L	Borg	Detr	——	Sal ½	4.7	S	Ross	Semi 53	Tryon	——	29x5.25
Jordan E	Link	Aut-L	*Aut-L	Long	War-G	Clev	Col ½	4.5	H	Gem	Semi 55¾	O & N	Alem	28x5.50
Jordan G	Link	Aut-L	*Aut-L	Long	War-G	Clev	Col ½	4.25	H	Gem	Semi 55¾	O & N	Alem	30x6.00
Kissel 6-73	Link	Del-R	*Del-R	Borg	War-G	M M	Col ½	5.3	H	Ross	Semi 57	Belf	Alem	30x6.00
Kissel 8-95	Link	Del-R	*Del-R	Borg	War-G	M M	Col ½	5.1	H	Ross	Semi 57	Belf	Alem	30x6.00
Kissel 8-126	Link	Del-R	*Del-R	Borg	War-G	M M	Tim ½	4.8	H	Ross	Semi 60	Belf	Alem	30x6.75
La Salle 340	Morse	Del-R	Del-R	Own	Own	Spicer	Own ¾	——	M	Sag	Semi 58	Own	Alem	19x6.50
Lincoln 8	Morse	Del-R	Del-R	Own	Own	Spicer	Tim-F	4.58	Bendix	Own	Semi 60	Own	Alem	32x6.75
Marmon 68	Diam	Del-R	*Del-R	Rock	War-G	Spicer	Sal ½	4.9	Bendix	Ross	Semi 56¾	Rub B	*Al-Z	29x5.50
Marmon 78	Diam	Del-R	Del-R	Rock	Mun	Spicer	Sal ½	4.9	Bendix	Ross	Semi 56⅜	Rub B	*Al-Z	31x6.00
Marmon Big 8	Diam	Del-R	Del-R	Rock	War-G	Spicer	Sal ½	4.45	Bendix	Ross	Semi 60	Rub-B	*Al-Z	31x5.50
Marquette Six	Link	Del-R	Del-R	Own	Own	Own	Own ½	4.54	M	Sag	Semi 54½	Tryon	——	28x5.25
Nash Single 6	Cel	Aut-L	Aut-L	Borg	Own	Fab	Own ½	4.7	M	Ross	Semi 50⅞	Tryon	Al-A	29x5.00
Nash Twin Ig. 6	Cel	Aut-L	Aut-L	Borg	Own	Met-Fab	Own ½	4.5	M	Gem	Semi 54	Own	Bijur	29x5.50
Nash Twin Ig. 8	Diam	Aut-L	Aut-L	Borg	Own	Met-Fab	Own ½	4.5	M	Gem	Semi 56¾	Own	Bijur	31x6.50
Oakland All-Amer.	Morse	Del-R	*Del-R	Own	Own	Own	Own ½	4.45	M	Sag	Semi 54½	Own	Al-Z	29x5.50
Oldsmobile	Morse	Del-R	Del-R	Borg	Mun	*Fab-Met	Own ½	4.41	Bendix	Sag	Semi 54½	Tryon	Alem	28x5.25
Packard 7-40-45	Morse	N. E.	Dyn	Own	Own	Own	Own ½	——	Own	Own	Semi 56	Own	——	19x7.00
Packard 7-26-33	Morse	N. E.	Dyn	Own	Own	Own	Own ½	——	Own	Own	Semi 62	Own	——	20x6.00
Peerless 6-61	Link	Aut-L	*Aut-L	Borg	Detr	Spicer	Col ½	4.88	H	Ross	Semi 54¼	Own	Alem	29x5.20
Peerless 6-81	Morse	Aut-L	*Aut-L	Borg	Detr	Spicer	Col ½	4.44	H	Ross	Semi 54	Own	Alem	31x6.00
Pierce-Arrow 133-43	Morse	Del-R	Del-R	Long	Own	Spicer	Own ½	4.23	*Bendix	Gem	Semi 60	Faf	Al-Z	*19x6.50
Plymouth	Cel	Del-R	*Del-R	Rock	Own	Own	Own ½	4.3	H	War	Semi 53½	Tryon	Al-Z	20x4.75
Pontiac Big Six	Morse	Del-R	*Del-R	Own	Own	M M	Own ½	4.42	M	Sag	Semi 54	Tryon	Al-Z	29x5.00
Reo F. C. Mate	Link	Del-R	Del-R	Borg	War-G	Spicer	Sal ½	4.45	H	Ross	Semi 55	Rub B	Al-Z	30x6.00
Reo F. C. Master	Morse	Del-R	Del-R	Long	Own	Detr	Own ½	4.42	H	Ross	Semi 55	Rub B	Al-Z	30x6.50
Roosevelt	Diam	Del-R	*Del-R	Long	War-T2C	Spicer	Sal ½	4.9	M	Ross	Semi 54⅛	Tryon	Al-Z	29x5.00
Ruxton Front Drive	Link	Aut-L	Aut-L	Long	Own	Own	Own	4.25	H	Gem	Semi 55	Own	Alem	31x6.00
Stearns-K. M. N 6-80	Link	Aut-L	*Aut-L	Borg	Own	M M	Own ¾	4.7	Own	Ross	Semi 63⅛	Belf	Alem	32x6.00
St'ns-K. de l. H8-90	Morse	De J	*De J	Long	Own	M M	Tim ½	4.5	Bendix	Gem	Semi 62¾	Own	Alem	32x6.75
St'ns-K. de l. J8-90	Morse	De J	*De J	Long	Own	M M	Tim ½	4.5	Bendix	Gem	Semi 62¾	Own	Alem	32x6.75
Studebaker Dict. 6	Whit	Del-R	Del-R	Long	War-G	Spicer	Own ½	4.3	Bendix	Ross	Semi 54	Own	Al-Z	19x5.50
Studebaker Dict. 8	Whit	Del-R	Del-R	Long	War-G	Spicer	Own ½	4.35	Bendix	Ross	Semi 54	Own	Al-Z	19x5.50
Studebaker Com. 6	Whit	Del-R	Del-R	Long	War-G	Spicer	Own ½	3.91	Bendix	Ross	Semi 54	Faf	Al-Z	19x5.50
Studebaker Com. 8	Whit	Del-R	Del-R	Long	War-G	Spicer	Own ½	4.36	Bendix	Ross	Semi 54	Faf	Al-Z	19x5.50
Studebaker Pres.	Whit	Del-R	Del-R	Long	Own	Spicer	Own ½	*4.08	Bendix	Ross	Semi 60	Faf	Al-Z	20x6.00
Stutz M	Link	Del-R	Del-R	Borg	†*Detr	M M	Tim ½	4.5	H	Gem	Semi 62¼	Own	Bijur	32x7.00
Viking 8	Whit	Del-R	Del-R	Borg	Mun	M M	Own ¾	4.63	Bendix	Sag	Semi 58	Tryon	Alem	30x6.00
Windsor 6-69	Morse	Aut-L	Aut-L	Borg	War-G	M M	Col ½	4.9	H	Ross	Semi 55	Own	Alem	29x5.25
Windsor 6-72	Link	Del-R	*Del-R	Borg	War-G	M M	Col ½	4.9	H	Ross	Semi 54	Own	Alem	29x5.50
Windsor 6-77	Link	Del-R	*Del-R	Borg	*War-G	M M	Col ½	4.9	H	Ross	Semi 54	Own	Alem	29x5.50
Windsor 8-82	Link	Del-R	*Del-R	Borg	*War-G	M M	Col ½	4.63	H	Ross	Semi 54	Own	Alem	31x6.00
Windsor 8-92	Link	Del-R	Del-R	Borg	*War-G	M M	Col ½	3.9	H	Ross	Semi 54	Own	Alem	31x6.50
Whippet Four	Link	Aut-L	*Aut-L	Borg	Own	M M	Own ½	4.56	*Bendix	Own	Semi 49½	Tryon	Alem	28x4.75
Whippet Six	Link	Aut-L	*Aut-L	Rock	Own	M M	Own ½	4.56	*Bendix	Own	Semi 53	Tryon	Alem	29x5.00
Willys-Kn't St. 6	Link	Aut-L	*Aut-L	Rock	Own	M M	Own ½	5.11	*Bendix	Own	Semi 51¾	Tryon	Alem	29x5.00
Willys-Kn't 66 B	Link	N E	N E	Rock	Own	M M	Own ½	4.6	Bendix	Ross	Semi 57¼	Own	Bijur	31x6.00
Willys-Kn't 70 B	Link	Aut-L	*Aut-L	Rock	Own	M M	Own ½	4.89	*Bendix	Own	Semi 53	Tryon	Alem	29x5.50

FRONT END DRIVE

CEL—Celeron. **DIAM**—Diamond Roller Chain. **LINK**—Link-Belt. **MORSE**—Morse Chain. **RAM**—Ramsey. **TEX**—Texolite. **WHIT**—Whitney Chain.

IGNITION SYSTEM

*Twin ignition.
DEL-R—Delco-Remy. **N E**—North East. **AUT-L**—Auto-Lite. **DE J**—De John.

GENERATOR AND STARTER

*This sign appears before each model in this column in which a Bendix starter drive is used.
DEL-R—Delco-Remy. **N E**—North East. **AUT-L**—Auto-Lite. **DE J**—De John. **DYN**—Owen Dyneto. **WEST**—Westinghouse.

CLUTCHES

LONG—Long. **BORG**—Borg & Beck. **ROCK**—Rockford. **BRN-L**—Brown-Lipe.

GEAR SET

*Four speed gear sets used as standard.
†Equipped with no back transmission device.
‡Elcar Model 95 is also available with four speed gear set at slight additional cost.
These transmissions are three-speed standard, unless noted. **WAR-G**—Warner Gear. **DETR**—Detroit. **BRN-L**—Brown-Lipe. **MUN**—Muncie gear.

CHASSIS LUBRICATION

*On Marmon models this applies only to front axle and steering assemblies, chassis has front rubber shock insulator and requires no lubrication.
ALEM—Alemite. **AL-A**—Alemite automatic. **AL-Z**—Alemite Zerk. **BIJUR**—Bijur. **OIL C**—Oil cups.

REAR AXLES

½ — Semi-floating. ¾ — Three-quarter floating. **F**—Full floating. **COL**—Columbus. **SAL**—Salisbury. **TIM**—Timken. **CLA**—Clark Equipment. **EAT**—Eaton.
†Ruxton front axle is I-beam with driving axle mounted above; rear axle is tubular.
*In the Cord front wheel drive the front axle is a Columbia three-quarter floating type. The rear axle is a Columbia I-beam.

GEAR RATIOS

Gear ratios given are standard, unless otherwise indicated.
†Other gear ratios available.
*Cadillac—Other ratio of 4.39 available.
*La Salle—Other ratios of 4.91 and 4.09 available.
*Studebaker President 135-inch model 4.31.

BRAKES

H—Hydraulic. **M**—Mechanical. **BENDIX**—Bendix Brake. **WEST-V**—Westinghouse Vacuum. **S**—Steeldraulic.
*Bendix front, own rear.

STEERING GEAR

ROSS—Ross Gear and Tool. **SAG**—Saginaw Steering Gear Division. **GEM**—Gemmer Mfg. **WAR**—Warner Gear Company.

SPRINGS

This column lists length and type of rear springs only.
SEMI — Semi-elliptic. **TR** — Transverse. **FL**—Full elliptic.
PACKARD—62-inch rear springs are used only on the 7-45 series. The 7-40 springs are 56 inches long.

SPRING SHACKLES

BELF—Belflex. **FAF**—Fafnir. **O & N**—O & N Spring Shackle Co. **RUB B**—Rubber Block. **SIL B**—Silent Block. **TRYON**—Tryon.

UNIVERSAL

UN P—Universal Products. **SPICER**—Spicer Mfg. **FAB**—Fabric. **CLEV**—Cleveland. **M M**—Mechanics Machine. *Oldsmobile uses Goodrich fabric front and Universal Products metal rear.

TIRES

On Pierce-Arrow 143, 18x7.00.
Studebaker President 135-inch model, 32x6.50.

FOUR-WHEEL DRIVE EXHIBIT AT ROAD BUILDERS' MEET

Clintonville, Wis., Dec. 30.—Two trucks will be exhibited by the Four Wheel Drive Auto Company at the American Road Builders' Convention at Atlantic City, N. J., January 11-18. The exposition will be held in the Municipal Auditorium. The Four Wheel Drive display will include the three and a half ton commercial utility and the fast, heavy-duty, two-ton Model H6. They will be ready for any highway work.

NATIONAL MOTORS GAIN IN 1929 SALES 26.1%

Irvington, N. J., Dec. 30.—National Motors Manufacturing Company, maker of Day-Elder trucks, announces 26.1 per cent. increase in sales in 1929 over the previous year.

CONTINENTAL MOTORS
Power of a Nation
AMERICA'S STANDARD

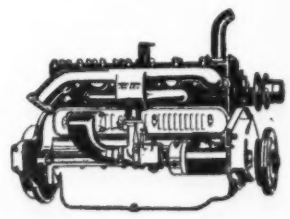
Twenty-Nine

Another year—its twenty-ninth—finds Continental Motors Corporation even better prepared to serve its customers with unexcelled gasoline engines for every purpose » » » Specialization of the highest degree enables Continental to build motors from blue prints quickly and at a low cost for such famous quality.

CONTINENTAL MOTORS CORPORATION

Offices: Detroit, Michigan, U. S. A.
Factories: Detroit and Muskegon

The Largest Exclusive Motor Manufacturer in the World



Continental Motors

DISTRIBUTION
SHOP EQUIPMENT
REPLACEMENTS

WHOLESALE

MERCHANDISING
ACCESSORIES
EQUIPMENT

Personalizing Jobbers' Sales Letters by Use of Pictures

Stickers Also Used to Attract Greater Attention

MOST automotive wholesalers have a little difficulty with their sales letters. "If I could see you personally and tell you about this plan I am sure I could convince you." Statements such as this are often seen in sales letters and in business correspondence generally and are indicative of the writer's desire to take advantage of the customer's increasing eye-mindedness.

The American people are beginning to see more than they ever saw before. It is a fact that they think more, learn more and remember more through the impressions picked up by their eyes than they did, say, twenty-five years ago.

Advertising is one of the powerful factors which have contributed to this condition; automobiles another. People travel more, see more, meet more new faces and more new scenes than ever before—and this habit is reflected in their buying.

Recently there has been developed what is called "signa-vision," and this means that the writer of a letter not only signs his name, but includes his photograph as well.

A good example is the memo sheet reproduced on this page. It is one of a type used by J. Don Alexander, president of Alexander Industries, Colorado Springs. It bears a pen picture of Mr. Alexander seated in a swivel chair and swung around to face the reader of the message. The reader is better able to visualize the thoughts and the man back of that message. The same idea is being used by a number of different firms, although the reproduced sample is sufficient to illustrate the idea effectively.

Since letters vary in length, one of these firms uses a one and one-half-inch sticker photograph of the signer of the letter. The letter is written as usual and the stenographer places the proper sticker just to the left of the "yours truly" and the space provided for the signature.

Some people are of the opinion that the sticker has an advantage over the printed sheet, inasmuch as the sticker, being slightly raised from the sheet, has a greater attention value.

In another case, the sticker is placed at the upper left-hand corner of the sheet, and the writer is pictured as greeting the party to whom the letter is addressed.

In another instance, pictures were used, in a refined form, to illustrate a four-page letter offering special inducements and plans to help dealers increase their sales and services.

The sheet of paper on which this letter was reproduced was of standard letterhead size, 8½ by 11.

It was folded across the center to make a four-page mailing piece. A second fold reduced it to proportions which permitted its mailing in an envelope 4½ by 5½ inches.

A sketch appeared on the first page of the letter; it was a line drawing portraying the general manager of the company and his assistant. The assistant was represented as saying, "The ——— company is interested in getting more business. How can we help?" Whereupon the general manager replied in effect, "Well, here's a plan that will help them."

On turning the page, the reader observed two more sketches on a two-page spread. One character was shown explaining the plan and the other was obviously quite enthusiastic about it and its use. In the center, and somewhat to the right, was a typewritten letter which explained the plan in detail and which was signed by the general manager.

This letter contained a more personal touch than the usual letter of this type and the reader was able to very readily visualize the personality of the sender.

Wholesalers may find that by spending a little more for stationery, correspondence may be given a more personal touch by these means, and as a result letters will draw more attention and more sales.

EXAMPLE of memo sheet used by J. Don Alexander, president of Alexander Industries, Colorado Springs

Editor's Column

JOBBERS haven't as yet taken to the aviation replacement and parts end of the business as rapidly as was anticipated a year ago, but those who have gone into the matter with thought and foresight report unusual activity, with profits just around the corner.

Of course aviation is still in its infancy and, with the great number of different plane makes appearing on the market practically from week to week, the automotive jobber would have to step some to keep pace with the advance of the newer industry.

In a Southern city, however, there is a jobber who, after three months of operating an aviation parts department, proved the feasibility, at least in his section, of such a branch in connection with his automotive business.

In his case it was but natural that he should enter this phase of the business, as he was the pioneer automotive jobber in his territory. He was also one of the first to add radio and also a leader in the electrical specializing in automobile work.

He says that the entering by his firm in the aviation parts business was in line with his policy of keeping pace with progress. Before opening the department, the jobber had the assurance of pilots, schools and other aviation business sources that they would trade with him. Through this promise or co-operation, the jobber went ahead and stocked $10,000 in aviation supplies.

Through the Research and Service Club of Chicago, the jobber was able to get a list of manufacturers, the equipment they had in stock and other information essential to opening such a department. The jobber further made a survey of the territory, visited the airports within easy reach and consulted with pilots, mechanics, airport officials and others in the business, as to what items to stock.

With this information at hand, the jobber was able, with some assurance, to order a supply of spare parts, field equipment and supplies for which he knew there would be a demand. The best trade, he found after a few months, was in spark plugs, helmets, flying suits, goggles, wire, tubing, turnbuckles, small parts, landing lights, etc. He did not attempt to stock engine parts, but says that he is ready to, as soon as he finds parts that can be used in a number of different make plane engines.

To provide efficient operation of this new department the jobber has separated the department into two classes; spare parts and accessories, equipment and furnishings for men and planes and equipment and spare parts for airports.

A city salesman has been placed in charge and, through his mixing with pilots, mechanics and airport officials, has built up considerable good will, in addition to being handy to receive orders and arrange for prompt shipments.

This jobber, located in a territory where there are a number of airports and emergency landing fields, and where other airports are being started for completion in the early spring, can be said to be on the ground floor, and with proper attention to the needs of the flying men he should be able to build up a profitable business.

Jobbers planning to enter the aviation end of the business would do well to study their territory carefully before investing too heavily in an aviation stock. If they are in a section that has a number of airports and where more are being contemplated, they would do well to confer with airport officials to find out whether they could get this trade. If they can they will also be getting in on the ground floor in an industry that is growing rapidly.

FORM DISTRIBUTING FIRM IN TENNESSEE

Little Rock, Ark., Dec. 30.—The formation of a wholesale distributing firm by Little Rock men to operate in Memphis, Tenn., as a Tennessee corporation, is announced by J. F. Finley, president of the Finley-Turner Tire and Service Company. The new organization is now operating under the firm name of Finley-Turner Oil Company, Inc., and has a place on Talbot Street, Memphis.

The Quaker State motor oil franchise for western Tennessee, northern Mississippi and eastern Arkansas has been secured. In this district there are more than 600 Quaker State oil dealers. J. F. Finley is presiden, R. E. Turner vice-president, and P. W. Finley secretary-treasurer.

GLOBE UNION MFG. CO. OPENS FACTORY BRANCH

Sioux City, Ia., Dec. 30.—The Globe Union Manufacturing Company, Milwaukee, is establishing a factory distribution branch here for its storage batteries and extensive line of automobile accessories. Eventual construction of a large warehouse and other facilities is forecast by G. W. Johnson, sales manager for the company in four states in this district, who will be in charge of the new branch.

SHIPS SECOND CARLOAD

Manchester, Ia., Dec. 30.—The Hold Fast Chain Company, manufacturer of automobile tire chains, this week shipped the second carload of its products to the Iowa State Highway Commission for use on state-owned cars. The shipment completed a $9,000 contract to supply the commission with the accessory made here.

American Bosch Magneto Announces Appointments Of Jobbers and Stations

SPRINGFIELD, Mass., Dec. 30.—The American Bosch Magneto Corporation announces the following automotive appointments for the month of November:—

Service stations: Danbury Auto Electric Service Company, 314 Main St., Danbury, Conn., Pilsen Electric Service, Pilsen, Kan.; Murdock Auto Electric, Kern and L Streets, Tulare, Cal.; Leedy & Baker, Hanford, Cal.; Battery and Electric Service, 1318 Main St., Napa, Cal.; Rush's Garage Service, Inc., San Francisco, Cal.; Jacksonville Electric Garage Company, 625 Hogan St., Jacksonville, Fla.; Cross Allen Auto Electric Company, 204 East 5th St., Austin, Tex.; Fairbanks, Morse & Company, Stuttgart, Ark.; Wico Service Station, El Dorado, Ark.; Osborne Auto and Electric Company, Brewster, Kan.; Reed's Battery Station, Pine Bluffs, Wyo.

Foreign service stations: Smith Auto Electric Company, 1st Avenue, West Prince Albert, Saskatchewan, Can.; Loreto, N. Melik Matar, Sgo. del Estoro, F. C. C. C. Necochea, Arredondoy, Viola, Buenos Aires, F. C. S.—A. I. Murga 100.

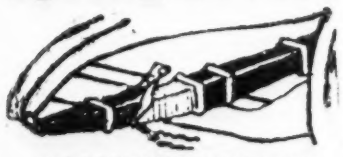
Automotive wholesalers: J. L. Eggert Auto Supply Company, 1219 North 8th St., Sheboygan, Wis.; Peake Auto Supply Company, 16th Street, McGee to Oak, Kansas City, Mo.; Kentucky Auto Parts Company, 607 West Broadway, Louisville, Ky.; J. F. Buchanan, 2401 Division Ave., South Grand Rapids, Mich.; Official Ignition Repair Corportation, 2383 1st Ave., New York city; E. J. Norris Company, Inc., 820 Main St., Rapid City, S. D.; Sterling Sales Company, 1108 Iturbide St., Laredo, Tex.; Earle Rogers Company, 22 12th St., Wheeling, W. Va.; Linscott Supply Company, 574 Commonwealth Ave., Boston, Mass.; F. Hersh Hardware Company, 325 Hamilton St., Allentown, Pa.; Automobile Accessories Company, 29 Baltimore St., Cumberland; Md.

Replacement parts wholesalers: West Franklin St., Hagerstown, Md.; Y.; George L. Williams Motor Corporation, 118 West Bank St., Petersburg, Va.; Campbell Bros. & Company, Mankato, Minn.; Genden Bros., 2387 Main St., Springfield, Mass.; E. B. Shipley Company, 105 West Patrick St., Frederick, Md.; Southern Uarts and Bearing Company, 1201 Commerce St., Lynchburg, Va.; Southern Bearing and Parts Company, 613 North Trade St., Winston-Salem, N. C.

Stock Visibility Feature of Jobber Display

THIS PICTURE gives a very excellent view of part of the main display floor of the Orlando branch of Partrick's, Inc., Florida, jobber of automotive equipment. The main office of the firm is located at 15 East Church St., Jacksonville

Jeavons Spring Covers



OLDEST MANUFACTURED
ANY STYLE OR MATERIAL
QUALITY HIGHEST—
PRICES REASONABLE
Easiest to Install. Liberal Discount
THE JEAVONS COMPANY,
Fremont, Ohio

Franklin 1930 Line Includes 4 Standard Sport Models

(Continued from Page 9)

dashing appearance new in the sedan field. A five-passenger sedan model mounted on the 132-inch wheelbase is another striking innovation in the quality field. The effect of placing this smaller body on a chassis with such a long wheelbase produces a pleasing relation between body placement and wheelbase and results in exceptional riding comfort, since the load is cradled well in the middle of the car's spring base.

Choice of Transmissions

For the first time in motor car history Franklin will offer a choice of four-speed or three-speed transmission.

In cars filling a sports niche, like the pursuit, roadster, speedster and two Pirate models, the four-speed gear set is appropriate for all requirements and is, therefore, employed exclusively. All other cars in the line, however, may utilize the option.

Models equipped with three-speed transmission have a 4.54 to 1 rear axle ratio as standard equipment, while others with a four-speed transmission have a ration of 4.25 to 1.

Combined with its enhanced appearance, the 1930 Franklin offers a new and higher standard of performance, both as to sustained speed and power development.

A careful study of the new Franklin air-cooled engine will show a distinct similarity of detail and mechanical perfection when placed side by side with the modern air-cooled airplane engines. The Franklin aviation features include the new side-blast cooling, the aluminum cylinder heads, the cylinder with integral cast fins, the overhead aviation-type valves, the oiling system, the pistons and connecting rods, the unusually high compression, and many other distinct aviation structural features or design fundamentals.

As an indication of its improved power and speed performances, executives of the Franklin organization point to a new transcontinental record from New York city to Los Angeles on the Pacific Coast. In this test, which was officially timed by Western Union, the new Franklin covered the 3,260 miles in 69 hours and 31 minutes, for an average speed of 46.89 miles an hour, thus beating the former record, which was also held by Franklin, by 4 hours and 29 minutes and clipping 8 hours and 20 minutes off the best record ever established by any other car.

The new Franklin air-cooled airplane-type engine is characterized by a greater power development for its size, the makers claim, than any automobile engine heretofore produced. It has a bore of 3½ inches with a stroke of 4¾ inches, developing 95 horsepower on the block at 3,100 r.p.m. The design of this engine places it definitely in the high speed, high compression class. With a compression ratio of 5.3 to 1, the new Franklin engine's compression is even greater than many popular in-line air-cooled aviation engines.

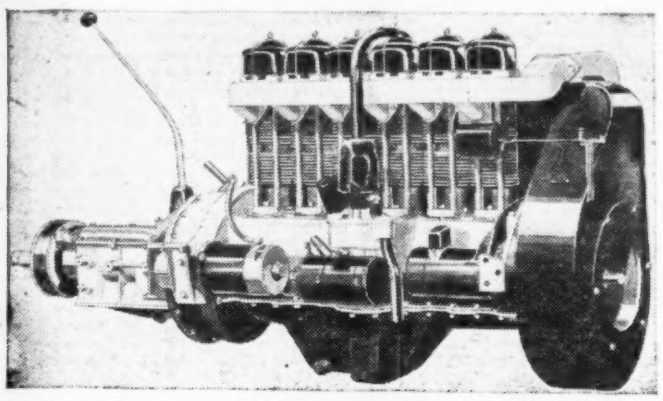
In keeping with modern airplane engine design, the new Franklin power plant is equipped with an aluminum cylinder head. Because of the better heat conductivity of aluminum and the large area of fins on the head and ports, head temperatures in this new engine have been lowered approximately 300 degrees Fahrenheit. By operating with head temperatures less than 500 degrees Fahrenheit, the valve seat life has been materially increased, since the valve guides and valves run at cooler temperatures. This results in minimum wear and long freedom from replacement.

Better Cooling System

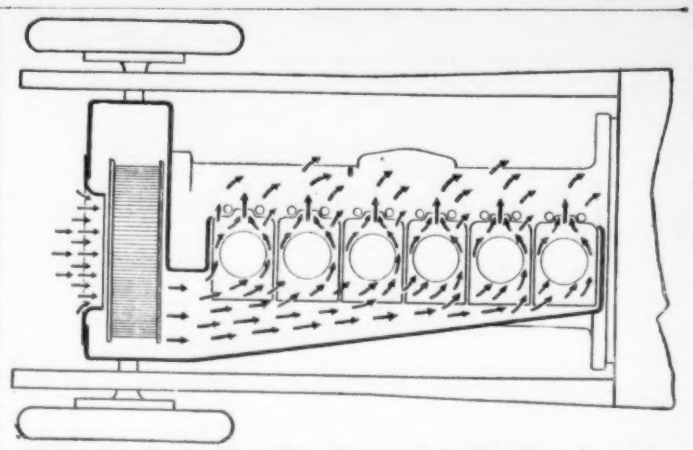
The great improvement in the cooling system is one of the notable engineering features of this power plant. Until the perfection of this new engine, cooling systems of air-cooled aviation motors have been entirely by direct exposure of the motor to the slip stream of the propeller and of the air through which the airplane travels and, naturally, resulted in a great amount of head resistance. Some engineers believe that the use of the Franklin system of induced air cooling in airplane engine design might permit of complete inclosure of the engine, producing a perfect stramline of the power plant and cooling system.

The further development by Franklin engineers of a new type of cooling fin for the cylinder head has created unusual interest in the ranks of automotive engineers and is seen as a forerunner of important changes in aviation engine design.

In the new Franklin engine each part of the cylinder cools itself individually by its own horizontal fins, thereby relieving the cylinder barrel of any function in cooling the heads, and providing a more even distribution of temperature over the entire cylinder head and between the exhaust and intake ports.



SIDE VIEW of new airplane-type Franklin air-cooled engine that develops ninety-five horse power



NEW SIDE BLAST air-cooling shown here by the arrows in a cut-away view of the new Franklin power plant

Valve Operation

The operation of the valve mechanism is worthy of special mention. Valves are arranged at ninety degrees instead of in line with the crankshaft and are actuated by overhead rocker arms pivoted in a cast iron case. Valve clearance for all engine temperatures is controlled by a new Franklin invention which is a compensating stud for adjusting the case height for every variation in expansion between the aluminum head and cast iron barrel. This stud expands and contracts with changes in cylinder-head temperatures and, by raising or lowering the valve cage, maintains proper valve clearances throughout the entire range of the engine's temperature within .002 inches of the original setting. Engineers believe that this invention will prove a distinct contribution to further efficiency of the airplane engine.

Because of the increased power and the high speeds of the new series Franklin engine, connecting rods have necessarily been greatly strengthened. The seven-bearing crankshaft is made of high carbon steel. Twelve counterbalances compensate for the throw of the cranks and the weight of piston and connecting rods, while the cooling fan which is mounted on the front end of the crankshaft has in reality the effect of a double fly-wheel and acts as a vibration absorber. The crankshaft is mounted in seven perfectly aligned steel backed bearings, this type also following airplane engine practice.

The great speed and power of this new engine necessarily requires a highly perfected lubricating system. A spiral gear pump has been developed which delivers approximately twice as much oil to each bearing point as was delivered in any previous Franklin engine. Oil is pumped into a header from which it is distributed through individual leads to the various bearing points of the motor. Before entering ing the header, oil passes through a relief valve which prevents pressure exceeding fifty pounds. This oiling system follows airplane engine practice.

Included in aviation features of the new Franklin is the use of aluminum pistons, each fitted with four Perfect Circle rings with oil

(Continued on Page 10)

Cumulative New Commercial Car Registration Table, November, 1929

Some of this data has been published previously, but it is given here complete for the convenience of our subscribers.

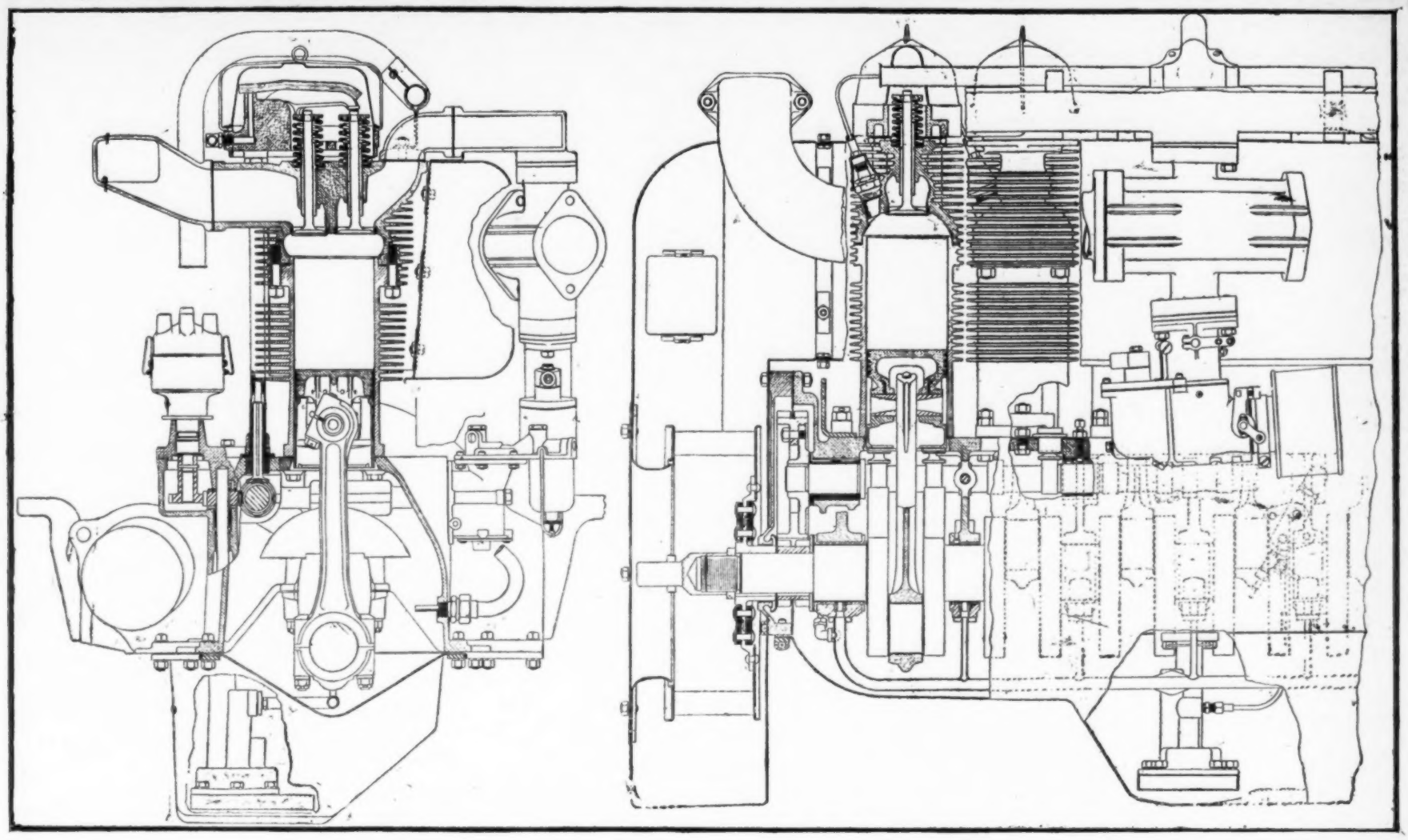
Returns for today: Louisiana, Nebraska, Ohio and Pennsylvania

States	Autocar	Brockway-Indiana	Chevrolet	Diamond-T	Dodge	Dover	Fargo	Federal	Ford	G. M. C.	International	Mack	Pierce-Arrow	Relay	Reo	Republic	Rugby	Sterling	Stewart	Studebaker	Whippet	White	Willys-Knight	Miscellaneous	Totals	States
Arizona			68		16	1	3		118	2	9				3		2					6	1	1	230	Arizona
Arkansas			252	1	7		1		302	1	23	1		1	7						8	2		2	608	Arkansas
Connecticut	11	8	140	12	43	6	5	7	199	25	23	32			36	1			8	5	7	10	1	17	596	Conn.
Delaware		3	19		4		1		38	2	2														69	Delaware
Florida		2	163		11	3			247	1	9	1			5						3	2			447	Florida
Georgia		2	115		9		1	2	179	12	17				7				1	1	4	7			357	Georgia
Idaho	1		51		12			1	78	2	11				3	2	1	1			3	2		2	170	Idaho
Illinois	3	2	173	20	59	1	10	5	620	31	68	6	1		30				3		16	12		94	1154	Illinois
Indiana		9	111	1	30	4	1	1	206	9	29	1		4	9		1		5	2	6	2		1	432	Indiana
Kansas		1	62	1	9		2		121	1	13				6	1			1	1	3	2		1	225	Kansas
Louisiana		1	189		17			1	301	1	29				6					3	5	7		3	563	Louisiana
Maryland	4	8	92	9	30	2	2	2	159	17	17	14			11	1			1	1	2	20	2	6	400	Maryland
Michigan			135	2	32	1	3	4	505	14	40				18	1	1				3	3		7	769	Michigan
Minnesota			197	3	28	2	6	1	369	9	74				16					2	18	5	2	7	739	Minn.
Missouri	3	12	251	17	63	1	8	2	529	36	49	16			10	2	4	3		4	16	12		12	1050	Missouri
Montana	3		34		10		4	1	49	1	12										2	2		1	119	Montana
Nebraska			116	2	7		1		211	4	23	1			7			1			9	1		1	384	Nebraska
Nevada			8		4				20	1	1													1	35	Nevada
New Hamp.		1	37	1	6			2	86	5	8	1	1		5		1		1		1			1	157	N. Hamp.
New Jersey	22	11	254	14	75		8	36	436	32	27	36		3	24		7	7	4	4	8	28	10	41	1087	New Jersey
New Mexico			86		5		1		80	4					1		1				2				180	New Mex.
N. Carolina	2		163		28	1	1		229	11	7	1			2	1			1		9	2		7	465	N. Carolina
Nor. Dakota			44		6		1		61	1	19				1		1				5				139	Nor. Dak.
Ohio	8	31	365	8	76	2	7	15	761	39	74	4		1	38	2	2	1	4	2	34	44	11	45	1574	Ohio
Oklahoma			283	1	54	1	8	5	386	8	39	8			17					1	13	5		1	830	Oklahoma
Oregon	3		90		13		4	4	171	10	7	4			3		3	2			1	5		13	333	Oregon
Penn'vania	76	60	651	23	245	11	29	19	1452	74	151	84		15	86	4	7	28	45	16	44	68	7	82	3277	Penna.
Rh. Island	12	2	40	1	18		2	8	97	9	12	7			13			4	6			4		7	242	Rhode Isl.
So. Carolina			137		7		4	1	130	7	7				1					1	1	1		2	299	S. Carolina
So. Dakota			70		6		1		50		32				3						9				171	S. Dakota
Utah			32		4		1		117	6	5				4		1					2		1	173	Utah
Vermont			19		8		2	3	42	2	11	1			1				1	1	1	1		1	94	Vermont
Virginia	1	3	658		32		3	1	671	7	17			1	5	1	1			1	21	5		3	1431	Virginia
Wash'gton			57		8	2	2		153	5	7	4			4		2		1	1	1	4		4	254	Wash'ton
W. Virginia		5	80	2	29	1	2		135	9	12	1		1	4	1			1		3		1	2	289	West Va.
Wisconsin			157	6	19	4	2	2	276	6	27	2			7			1	4	4	16	6		10	549	Wisconsin
Dist. of Col.	14		19	2	5	1	1		95	9	4	1		1	3		1	1				5		8	170	Dist. Col.
Totals	163	161	5418	126	1035	44	127	123	9679	413	915	226	2	27	396	17	36	49	86	50	274	275	35	384	20061	Totals

Figures in this table are from R. L. Polk & Co. of Detroit, with exception of Illinois, which are supplied by the Robinson Advertising Service, Springfield, Ill., and New Jersey, which are furnished by the New Jersey Motor List Co., New Car Division, Trenton, N. J. Readers desiring county, city or town lists, or lists of owners in any given section, may obtain these by addressing any of these three companies.

Commercial Car Registrations do not include buses.

Airplane Type Engine in New Line of Franklin Cars



Side elevation and transverse section of the new Franklin engine, which bring out the airplane characteristics of this power plant

Side elevation and transverse section of the new Franklin engine, which bring out the airplane characteristics of this power plant

(Continued from Page 9)

control feature. Connecting rods as in aviation engines are duralumin, each set being carefully matched in weight to insure against engine vibration.

Propeller Shaft Improved

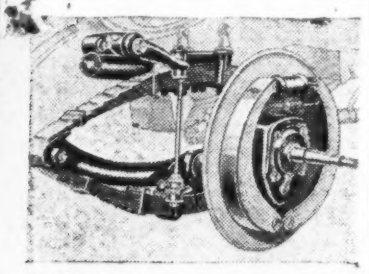
The rear axle follows previous design except that the wheel bearings are now double and take the thrust in each direction. This permits a clearance between the inner ends of the drive shaft and thus eliminates wear at this point.

An improvement is found in the balance of the propeller shaft which has been obtained by the use of a thin walled tubing which is two inches over all in diameter on the Series 145 and 2½ inches on the 147 model.

A larger carburetor with a 1½-inch venturi instead of 1¼, as formerly used, has been provided to take care of the increased intake flow in the new engine. The use of the larger carburetor, together with the new manifold, larger valves and ports, has materially reduced the power absorbed in getting the mixture into the cylinders and has been effective in creating a higher engine efficiency. The fuel transformer also has been increased in area to give freer flow of exhaust gases.

An interesting phase of this engine is that, although it out-performs its predecessor, delivering more power at every engine speed and developing greater top speed, less fuel and oil are consumed. At a cruising speed of twenty miles an hour the car shows the unusual economy of seventeen miles per gallon of fuel.

The car will accelerate from five to twenty-five miles in 6.9 seconds,



SECTIONAL view of the re-designed two-way shock absorber and its attachment to the longer full elliptic springs in the 1930 Franklin. A view of the new internal brake is also shown

from ten to forty miles in 10.2 seconds, from twenty to fifty miles in 11.5 seconds and from thirty to sixty miles in 14.3 seconds and shows the same remarkable smoothness and riding comfort at sixty, seventy and eighty miles an hour.

More Comfortable

The 1930 Franklin, through the use of new, longer and softer, full elliptic springs and newly designed hydraulic shock absorbers, is more comfortable and seasier riding than its predecessor. The size of the cylinder diameter of the shock absorber has been changed from 1¼ to 1½, giving an interior area 44 per cent. greater than previous models. The rear springs are four inches longer than previously, thereby reducing to a minimum the little jolts commonly encountered in city driving over bad pavements. Furthermore, this combination of more responsive springs and increased control produces a steady ride, with no perceptible pitch to the front of the car nor swing to the rear. Back-seat riding comfort is a result especially noticeable. Silico maganese steel is used for all Franklin spring leaves rather than for main leaves only, as is general practice.

A new type of seat cushion also contributes greatly to the increased riding comfort of this model. Each spring is individually cushioned in a burlap bag, giving the seats themselves a distinct shock absorbing quality and removing the "jiggle" from them. Redesign of the seat backs also has contributed to these qualities of comfort.

Non - shatter glass is used throughout in all of the new Franklins. The original Franklin development of clear vision corner posts also is maintained. The hydraulic four-wheel braking system has been redesigned so that the necessity for brake adjustments has been reduced 50 per cent. Instead of mounting the master cyclinder on the frame, as is common practice, it is rigidly mounted on the side of the transmission. These brakes respond actively to a very slight foot pressure, bringing the car to a smooth easy stop. In case of emergency, however, a stronger application of foot pressure will halt the car almost in its tracks.

The ease of steering the new Franklin has been enhanced with the adoption of a worm and roller type steering mechanism which keeps the car directly on the course it is pointed. This permits easier handling, either in slow driving or in parking. The device has a gear reduction of 18 to 1.

There has been no change in the well-known Franklin flexible chassis, which is of outstanding design in the automotive industry because of its low unsprung weight. This chassis for years has been a major contributing factor in Franklin riding comfort.

The 1930 Franklin bodies, due to their new design of seat backs, have added greatly to the interior roominess of the car. This new design has provided an actual increase in interior dimensions, in leg room. This feature of rominess has been increased in the front compartment by placing the gear shift lever further forward in the toe board, instead of coming out of the floor boards, as in previous models.

The new, narrow radiator design is of striking appearance and maintains the same mark of advanced style, which is carried out in every detail of the car. A narrow chromium framework follows the lines of a graceful arch, which is crowned by a racy adoption in metal of a coxcomb design. From top to bottom of the new hood are thin metal vanes, which act as shutters thermostatically operated to control the temperature of the motor. Their jet black color makes a contrast with the chromium molding of the hood front. This appearance is pleasingly set off by sharp, hairline pipings at the apex of each vane.

This installation improves engine performance by regulating the carburetor temperature, and also insures greater comfort for front-seat passengers, by keeping toeboard temperatures free from extremes of heat or cold.

Symmetry in Form

Many elements of appearance of the 1930 Franklin are entirely new, from the narrow hood front to the carefully shaped rear quarters. There is a symmetry in form from front to rear, which makes the whole a unified design unusually pleasing. This complete symmetry is aided in the majority of types by a belt molding whic hextends along the cowl and out onto the hood.

In the design of the new Franklin those things which are necessary to the car's operation and performance have followed an artistic design. For instance, staggered hood louvres of the dart type are thoroughly in keeping with the general speed lines of the car, beside serving as outlets for the cooling air currents.

The selection of exterior color combinations is subject to approval of Raymond Dietrich, body designing authority. The artistry of Dietrich's work is seen in the adoption of a wide range of body colors, which are in perfect harmony with the style and upholstery of the cars throughout.

The predominance of broadcloth material, which characterized the world's finest car interiors at this year's European salons, also has been adopted in the new Franklin. The use of patterned broadcloths for cushions in some of the new interiors, contrasting delicately with the plain upholstering of the side walls and roof, provides an added touch of artistry, wholly in keeping with the quality of the car.

All hardware and metal fitments are finished in Butler silver and are designed in Colonial motif to harmonize perfectly with the interior decorative ensemble. The tonneau foot rest is now carpet covered. The steering wheel, in keeping with the latest practice, is a three-spoke type with a rubber-mounted rim. This wheel is conveniently placed at such an angle that the driver at all times has a complete view of the instrument panel.

Gas tank cover skirts of a new design are now standard on all models, while the folding trunk rack, which is mounted with chromium-plate panels, enhances the appearance of this new automobile.

Round Design Tail Lamp

A round design tail lamp has been adopted on the new models, the one for the 145 being a two-way lamp, showing tail and stop light. The model 147 design is a three-way lamp, having tail, stop and back-up light.

On all models employing a visor the new metal military type is used.

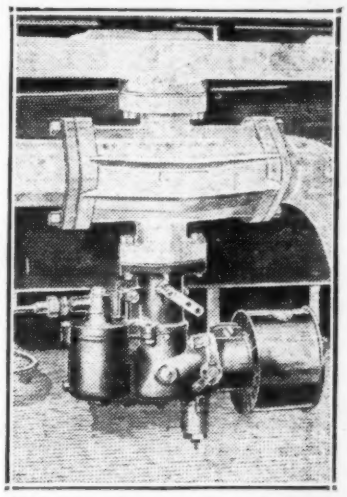
The running boards are an all-metal design, amply reinforced to provide extreme rigidity, yet being of the same weight as the former wood boards and preventing any tendency toward distortion.

The sweeping, full-crowned fenders carry out the last detail of the smart streamline effect, this being aided by the spare wire wheels, which are mounted in the forward fender wells. Where wood wheels are standard the spare tire is carried on the rear on the Model 145 and on left front fender on Model 147.

Adjustable front seats have been provided for various models, this feature giving greater convenience and comfort for the driver.

In addition to the models already mentioned, the new 1930 line is comprised of sedan, town sedan, coupe, convertible coupe, Victoria brougham and De Luxe sedan, designated as the Model 145, and mounted on the 125-inch chassis; the seven-passenger sedan, limousine, sedan-limousine and roadster are termed the Series 147, and are mounted on the 132-inch chassis.

The complete line of standard Franklin cars is augmented by a wide variety of custom models by such noted designers as Dietrich, Holbrook, Locke and Derham, in a price range from $5,500 to $10,000.



THIS is a view of the carburetor and air cleaner employed on the new Franklin airplane type engine

DEKRAFFT WILL DIRECT U. S. RUBBER'S FINANCES

New York, Dec. 30.—F. B. Davis, Jr., chairman of the board and president of the United States Rubber Company, announces that William deKrafft, who has been for many years associated with the Baldwin Locomotive Works as vice-president in charge of finance, will assume the duties of chairman of the finance committee of the United States Rubber Company January 2. For some time Mr. deKrafft has been a member of the board of directors of the United States Rubber Company.

Mr. Davis, Jr., also announces the appointment of Dr. W. A. Gibbons, of Montclair, N. J., as director of the development department of the company. In his new post, Dr. Gibbons assumes charge of all research work.

Stocks Gather Strength as Shows Approach

PASSENGER CAR GROUP IS LEADER

Chrysler and Hudson Make Best Gains For Week

By CONRAD ALEXANDER

NEW YORK, Dec. 30.—Reflecting a generally improved feeling regarding the immediate future of the automotive industry and the approach of the annual national automobile shows, the stocks of motor companies in the past week displayed signs of an underlying strength that has been missing in recent weeks.

Although the gains in average prices of the stocks listed on the various exchanges were small, activity on the buying side became more pronounced and provided a support that sent several issues up 2 and 3 points while most of the others held their own.

Real leadership was still lacking among the motors, however, with General Motors moving within a range of a couple of points and unable to make any headway. This issue closed the week at 39⅞, which was ¾ of a point lower than it started the week. This stock did show some real strength in resisting selling every time it fell below 40. Buying set in usually as quickly as the shares were available at below that point and this buying was sufficient in every case to run the stock back up above 40.

The passenger car group of stocks was especially strong during the week, although the average price increased only .86 of a point in the five days' trading. In this group, Chrysler and Hudson displayed the most strength.

Chrysler spurted early in the week from around 33 to around 37 and then in the week end profit taking it sold off to 35¼, where it closed for a net gain of 2 points. Hudson was strong on reports that its new models at the New York National Show would be something of a sensation. This stock closed at 54⅝, a net gain of 3⅜.

The passenger car group closed the week at an average price of 36.23, which compares with the low for the year of 33.61, made in the week ended November 30.

The average price of the sixty representative stocks used in the Automotive Daily News compilation finished the week with a loss of .08 of a point, largely due to the weakness in the rubber company stocks. The average price of the sixty stocks at the week's end was 33.35, as compared with the low of the year of 32.19, made in the week ended November 16.

The rubber stocks reached a new low for the year in average price, the closing average being 35.46, as compared with the previous low of 36.93, made in the previous week. The trucks lost .90 of a point during the week, closing at 20.05, as compared with the low for the year of 19, made in the week ended November 16.

The year that is just closing has been a notable one for the stock market and the automotive stocks were as greatly affected in the tremendous collapse of prices in October and November as most any other group. As a result automotive stocks are finishing the year near their low prices for the year, in direct contrast to the fact that in 1928 they closed the year at their highs.

As a matter of fact, the average price of the sixty representative stocks established its high for 1928 in the week ended December 29, or just a year ago. The passenger car and tire groups made their high prices in that week, while the accessory and truck groups reached their 1928 highs on December 1.

After the big bull market of 1928, the motor stocks, along with the market and general, proceeded to seek higher levels. But the motor stocks, unlike the rest of the market, began their decline several months prior to the reversal in form by the general stock market.

It is interesting to note that the average price of the sixty motor shares soared to 67.60 in the week ended March 2, 1929, and never reached that point again. This may come as a surprise to those who had thought the automotive stocks had continued their upward climb well into the year. This reveals that the general price tendency of the motors has been downward since early in March, or for ten months.

The passenger car group, largely because of the sensational advance of a few individual stocks, such as Auburn, Marmon and Packard, remained at a high level longer than any other group and did not reach its high point for the year until the week ended September 7, when it touched 70.30. This compared with a high of 61.15 in 1928 and compares with the low for 1929 of 33.61, reached in the week ended November 30.

The bear movement cut the price of the passenger car stocks down to less than half of their highs for the year. A similar reduction was suffered by the other groups and the sixty stocks dropped from their high of 67.60 on March 2 to 32.19 on November 16.

The accessory group advanced from 73.91 to 80.87 from December 1, 1928, to March 2, and then began a decline that carried it down to 33.38 on November 16, this being a more drastic falling off than occurred in any other group.

Tire stocks reached an average price of 72.06 on March 16 and fell off to 35.46 last week. The truck company issues reached their high of 47.02 on April 20 and declined to 19 in the week of November 16.

The average prices in all cases are below the low points for 1928, showing that prices are now back to their 1927 levels. The low mark for the sixty representative stocks for the year 1928 was 37.30, reached in the week ended February 18.

The situation as the year ends is just the reverse of a year ago at this time. Prices entered the year 1929 at their high marks for the past year, while they are entering 1930 at close to their low marks for the past year; past two years, in fact.

There is every reason to believe that the year 1930 will be marked by a reversal in the trend of the motor stock prices and that at this time next year stock quotations will be near their highs for 1930. While little in the way of advance is expected for some months, when the upward trend does come about, it is expected to carry over into 1931.

AUTOMOTIVE DAILY NEWS STOCK PRICE AVERAGES

	Dec. 21	Dec. 28	Net chge.
60 Automotives	33.43	33.35	— .08
20 Pass. cars	35.37	36.23	+ .86
20 Accessories	35.98	35.99	+ .01
10 Rubbers	36.93	35.46	—1.47
10 Trucks	20.95	20.05	— .90

ACTIVE STOCKS

General Motors	40¼	39⅞	— ⅜
Chrysler	33¼	35¼	+ 2
Packard	15¼	15¾	+ ½
Hudson	51¼	54⅝	+ 3⅜
Mack	70	69½	— ½
Electric Auto-Lite	81¼	80¼	—1

Range of Automotive Stocks

NEW YORK CURB EXCHANGE

Sales		High	Low	Close	Net chge.
102700	Cities Service	26⅝	24⅛	26⅜	+ 1¾
800	Cities Serv pf	88⅞	88⅜	88⅞	..
..	Cont Dia-Fbr	..	No sales		
7700	Cord Corp	12⅞	11	11	— ½
2600	Doehler D C	17¼	16	16¾	+ ¾
6700	Durant Motor	5	4⅞	5	..
1600	Fageol Motor	2⅝	2⅜	2⅜	— ⅛
300	Fedders	8⅞	7⅞	8⅛	— ⅜
..	Federal Mogul	..	No sales		
600	Federal Screw	32	29⅞	32	—1⅛
5300	Fiat	17⅜	16⅜	16¾	+ ½
4100	Ford Canada	30⅜	28¼	30¼	+1¼
700	Ford France	7½	7	7	— ⅛
7500	Ford Ltd	10¾	10⅛	10⅛	— ⅜
75	Franklin Mfg	72¼	72¼	72¼	+1¾
..	Gen Tire & R	..	No sales		
..	Greenfld T&D	..	No sales		
200	Hall Lamp	14½	14	14½	+ ⅜
..	Henney	..	No sales		
..	Hood Rubber	..	No sales		
..	India Tire	..	No sales		
100	Isotta Fras	8¾	8¾	8¾	— ⅛
..	Jaeger	..	No sales		
700	Lakey	9	8⅞	9	..
..	Mcuay-Norris	..	No sales		
300	Midland Steel	75¼	75¼	75¼	..
600	Nat Rub Mch	19½	17¾	18¼	—1¾
4400	Paramnt Cab	13⅞	11	12⅜	— ¾
..	Perfect Circle	..	No sales		
..	Pines Winterft	..	No sales		
900	Pitts Pl Glass	51¼	50¼	51	..
..	Rolls-Roy Am	..	No sales		
..	Ross Gear	..	No sales		
..	Safe-T-Stat	..	No sales		
400	Seiberling	10	9	9	—2
..	Smith A O	..	No sales		
..	Sparks With	..	No sales		
11100	Stutz Motor	3⅝	2⅝	2⅞	+ ¼
900	Thermoid Co	20⅜	19⅛	19⅛	—1⅛
2000	Thomp Prod	25¾	22⅛	23½	..
..	Triplex	..	No sales		
..	Tung Sol	..	No sales		
..	U S Asbestos	..	No sales		
7600	Watson J W	1⅛	¾	1	..
1100	Wayne Pump	9½	8	8	—1½
..	West Auto	..	No sales		
..	Yelw Taxi NY	..	No sales		

NEW YORK OVER-THE-COUNTER

Weekly Summary

Div.		Bid	Asked
1.50	American Hard Rubber	..	68
8	Dixon (J) Crucible	160	168
3.50	Doehler Die Casting	32	..
7	do pf	..	95½
..	Eisemann Magneto	20	30
1.75	do pf	82	90
..	Rolls-Royce America	10	15
..	do pf	15	25
..	Splitdorf Beth	3¾	4¾

NEW YORK STOCK EXCHANGE
WEEK ENDED SATURDAY, DECEMBER 28, 1929

Previous, 1929 High	Previous, 1929 Low	Div.		Sales	High	Low	Close	Net Change
104⅞	7	....	Advance Rumely	1,600	13¼	12	12	— ⅝
119	15	....	do pf	3,100	23⅛	21	21	— 2
223⅜	77	4.50	Air Reduction	40,300	121¾	106⅛	116½	+ 3½
11¼	1	....	Ajax Rubber	21,600	1⅝	1	1¼	— ¼
75½	35⅛	3	Allis-Chalmers	13,000	51	47	47	— 2
76½	27	....	Am. Bosch Magneto	7,000	42	37⅛	40½	+ ⅛
95⅛	70¼	7	Am. Chain pf	300	75½	74¼	75½	— ¾
8⅞	2½	....	Am.-La France	2,800	2⅝	2½	2⅝	+ ⅛
514	120	4	Auburn Auto	5,100	205½	183	195	+10
104⅜	25	2	Bendix Aviation	39,600	34⅞	31⅛	33½	+ ⅞
136¾	37	5	Bohn Aluminum	9,200	54⅞	47¾	51¾	— 2⅞
86⅞	26	4	Borg-Warner	11,900	34	31⅜	32	+ ¼
63⅛	8½	....	Briggs Mfg. Co.	46,000	16⅜	13	14¾	+ ⅛
43½	17⅜	2	Briggs & Stratton	3,100	21	17⅜	20½	— ½
73⅞	14	3	Brockway Motor	4,000	18¼	16⅝	16⅝	— 1⅜
22⅞	8⅛	1.60	E. G. Budd Mfg. Co.	3,600	10⅝	9⅜	9½	+ ⅛
12½	7⅞	1	Budd Wheel	5,500	9½	7⅞	8⅜	— 1⅛
54¾	25	2	Bullard	2,900	32	29½	29½	—
61	50¼	3	Caterpillar Tractor	3,700	53½	51	51⅛	
47½	21⅞	....	Chicago Pneu. Tool	4,300	25	22½	23⅜	
36	21⅞	3	Chicago Yellow Cab	340	27	26	26	
135	26	3	Chrysler Corp.	203,100	37¼	32	35	
61⅞	25	3	Clarke Equipment	1,000	37	35	35	
62⅝	18	2	Commercial Credit	18,500	23⅝	21	21	
105¾	70	6.50	do pf	240	77	76	76	
79	28⅛	1.60	Com. Invest. Trust	21,750	39¼	37	37	
109	96	7	do pf	400	100	99	99	
28⅜	6¼	.80	Continental Motors	37,600	7⅛	6	6	
121¼	58	3.50	Cutler-Hammer	700	79	76	76	
231	80	5.20	Du Pont	40,800	118½	108	108	
76¾	18	3	Eaton Axle & Spring	8,800	29⅛	27⅛	28	
174	50	6	Electric Auto-Lite	29,800	84¼	77⅜	78	
104½	55	5	Elec. Stor. Battery	5,000	69¼	66	68	
22½	3¼	....	Emerson Brant	600	3½	3½	3½	
73¾	15	2.50	Evans Auto Load	5,900	22	20½	20¾	— ⅛
22⅜	5	.80	Federal Motors	1,200	8	8	8	....
37	25⅛	1.60	Firestone T. & R.	6,800	29⅞	25⅛	25⅛	— 4
89⅝	83⅜	6	do pf	7,700	86⅞	83⅜	85½	+ ½
20⅛	3	....	Fisk Rubber	19,700	3½	3	3	— ½
72½	12	....	do 1st pf	1,090	15⅜	12½	12½	— ½
33⅞	5	....	Gabriel Snubber	2,900	5¾	5⅛	5⅜	— ⅜
25	3	....	Gardner Motor	5,300	4¼	3	4⅛	+ ⅛
403	168½	6	General Electric	80,300	236½	217½	229¼	+ 3¼
91¾	33½	3.60	General Motors	269,200	41¾	38¾	39⅞	— ⅝
126½	112	7	do pf	700	120½	120⅛	120⅛	— 1⅜
64⅛	26	2	Glidden Co.	10,900	33⅞	31¼	32½	— ⅝
106⅛	95	7	do pf	20	102	102	102	....
105¾	38¼	4	Goodrich Co.	32,500	42⅜	38¼	40½	— 2½
115⅛	98⅛	7	do pf	100	99	99	99	— 2
154½	60	5	Goodyear T. & R.	24,900	65⅞	62	63½	— 2½
104⅞	87	7	do pf	1,000	94⅞	93½	93½	— 1⅜
54	7⅜	....	Graham-Paige Motor	42,400	10½	8⅝	9½	....
68⅜	5½	....	Hayes Body	6,400	9	7¼	7¼	— 1¼
52¾	13	2	Houdaille Hershey	10,900	20½	18	19¼	— ⅜
93½	38	5	Hudson Motor Car	53,700	57¼	50⅜	54⅝	+ 3⅜
82	18	2	Hupp Motor Car	27,900	21⅞	19¾	20⅜	+ ⅜
32½	3½	....	Indian Motocycle	2,500	5	3⅞	5	+ 1
14¼	2	....	Intercon. Rubber	6,600	5	4⅛	5	....
142	65	2.50	Internat. Harvester	16,900	79½	74	76	— 2⅞
145	137	7	do pf	900	140¾	140½	140½	— ½
242¾	90	3	Johns-Manville	56,500	122¾	105	116¼	+ 1½
16½	1½	1	Jordan Motor Car	4,000	2⅜	2	2⅜	+ ¼
24	3⅛	....	Kelly-Springfield	22,700	3⅝	3⅛	3¼	— ¼
100	28	....	do 6s pf	900	29½	28	28	— 2
94⅞	16	....	do 8s pf	1,930	21	16	17½	— 3⅜
59¾	18⅝	2	Kelsey-Hayes Wheel	14,700	23	18	23	+ 1⅜
25	5	....	Lee Rubber & Tire	1,900	6½	5⅞	6	....
61	37⅝	2.60	Link Belt	100	39⅞	39⅞	39⅞	+ ⅞
114¾	55⅛	6	Mack Trucks	13,200	72	68½	69½	— ½
89⅞	30	6	Marlin Rockwell	4,200	40⅛	38	39⅞	— 2⅛
104	19	4	Marmon Motor	10,900	26½	23	24¾	+ ¾
18	2½	....	Martin Parry	1,700	3⅜	3¼	3¼	— ⅛
34⅞	9	2	Mengel	900	16	15⅛	15½	— ½
28⅞	3¼	....	Miller Rubber	3,000	3⅞	3¼	3¾	+ ⅛
5	1½	....	Moon Motors	300	4	3½	3½	+ ¼
31¾	3¼	....	Moto Meter, G & E.	9,900	5¼	4¼	4⅞	— ¼
142	36	10	Motor Products	3,600	57	51¾	54½	+ 3½
44⅜	21	3	Motor Wheel Corp	5,000	27½	26⅛	26⅞	+ ½
81⅞	10	....	Mullins Mfg. Co.	2,700	14½	12⅛	12½	— 3¼
100⅞	14⅞	2	Murray Corp.	42,400	20¾	17⅜	19¼	+ 1⅜
118⅞	40	6	Nash Motors	49,500	54⅞	50½	52⅞	+ 1¾
6¼	¾	....	Norwalk T. & R.	..	No sales			
45	8	....	do pf	..	No sales			
10⅞	2½	....	Omnibus Corp.	5,925	3⅛	2⅞	3	— ⅜
55	22¼	3.50	Otis Steel	3,700	32	28	32	+ 2
32½	13	1	Packard Motor Car	118,600	16⅝	14⅝	15¾	+ ½
22½	5⅛	....	Peerless Motor Car	4,900	7⅝	6½	7⅛	— ⅛
37⅞	18	....	Pierce-Arrow	..	No sales			
87½	67¾	6	do pf	..	No sales			
58½	28	2.60	Raybestos Manhattan	9,400	33½	32	32	— 1
31⅞	10⅛	1.60	Reo Motors	12,700	11⅞	10⅞	11⅞	+ ⅜
12¼	3⅝	....	Reynolds Spring	2,300	4½	3⅞	4	....
66¾	20⅛	....	Spicer Mfg. Co.	10,200	22¾	20⅛	22⅝	+ 1⅝
55⅞	38	3	do pf	1,200	40½	40	40½	+ ½
77	30	3.50	Stewart-Warner Spd.	20,300	39½	35	37½	— ½
98	38¼	5	Studebaker Co.	33,000	43⅞	40½	41¼	— ½
126	115	7	do pf	..	No sales			
34⅜	11½	.80	Timken Detroit Axle	7,900	15¼	14½	14¾	— ⅛
139⅜	58½	3	Timken Roller Bear.	43,700	77	68¼	75	+ 3½
63	30	2.50	Trico Products	8,700	30⅞	30	30½	— ⅝
65	15	....	U. S. Rubber	63,700	25⅝	22½	24	— 1⅞
92½	40⅛	....	do 1st pf	11,200	50½	49	49	— 2
42⅞	15	2	Warner Quinlan	7,900	21	19½	20⅛	— ⅜
67¾	36½	2	Westinghouse A. B.	4,100	46½	44	45	— 2
53½	27¼	2	White Motors	10,100	31½	31	31⅛	— ⅝
61¼	19	2.50	Wilcox Rich A	2,600	26	24½	25¼	— ⅜
62	12⅜	2	do B	11,400	19	17¾	19	+ ½
35	5¼	1.20	Willys-Overland	106,600	8	6¾	7¼	— ½
103	65⅛	7	do pf	100,350	67¼	65⅛	65¼	— 4¾
88	61¾	5	Yale & Towne	..	No sales			
51¼	7½	....	Yellow T. & C. B.	30,000	15⅜	12½	14	+ 1⅜
96½	80	....	do pf	..	No sales			

PICKWICK NET FOR FIRST NINE MONTHS IS $632,199

Los Angeles, Dec. 30.—The Pickwick Corporation for the nine months ended September 30, last, reports net earnings of $632,199 after all charges and preferred dividends, but before Federal taxes and depreciation.

The net operating profit totaled $790,315, compared with $935,743 for the entire 1928 year.

"Despite the high rate of earnings these figures do not reflect the $1,465,000 obtained through the merger early this year of the corporation's stage system by the formation of the Pacific Transportation Securities, Inc., and Pickwick-Greyhound Lines, Inc.," said Charles F. Wren, president. "This amount has been applied directly to surplus."

Stockholders of G. M. Show 93,237 Increase in Year

NEW YORK, Dec. 30.—The total number of General Motors common and preferred stockholders for the fourth quarter of 1929 was 198,600, compared with 140,113 for the third quarter, 125,165 for the second quarter and 105,363 for the first quarter, a gain of 93,237 during the year.

There were 176,693 holders of common stock and the balance of 21,907 represents holders of preferred and debenture stocks. These figures compare with 117,767 common stockholders and 22,346 preferred for the third quarter, with 102,306 common and 22,859 preferred for the second quarter, and with 82,415 common and 22,948 preferred for the first quarter.

The total number of stockholders of both classes by quarters since 1917 follows:

Calendar Years	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
1917	1,927	2,525	2,669	2,920
1918	3,918	3,737	3,615	4,739
1919	8,012	12,523	12,358	18,214
1920	24,148	26,136	31,029	36,894
1921	49,035	59,059	65,324	66,837
1922	70,504	72,665	71,331	65,665
1923	67,115	67,417	68,281	68,063
1924	70,009	71,382	69,428	66,097
1925	60,458	60,414	58,118	50,917
1926	54,851	53,097	47,805	50,369
1927	56,520	57,595	57,190	66,209
1928	72,986	70,399	71,682	71,185
1929	105,363	125,165	140,113	*198,600

*Senior securities of record October 7, 1929, and common stockholders of record November 23, 1929.

CONTINENTAL MOTORS NET FOR YEAR IS $710,535

New York, Dec. 30.—The Continental Motors Corporation and subsidiaries report for the fiscal year ended October 31 a net profit of $710,535 after all deductions, equivalent to 33 cents a share on the 2,113,000 outstanding shares.

In the preceding year the net profit was $1,802,335 or $1.02 a share on 1,750,845 shares, after all regular charges and an additional $358,239 or engine development, special tools, dies and patterns written off.

BUILDING BUS GARAGE

Spokane, Wash., Dec. 30.—Auto Interurban Company is constructing a garage east of the city to house buses used in late night trips out of Spokane on the Apple Way run.

WESTINGHOUSE BEGINS WORK ON NEW PLANT IN NEWARK

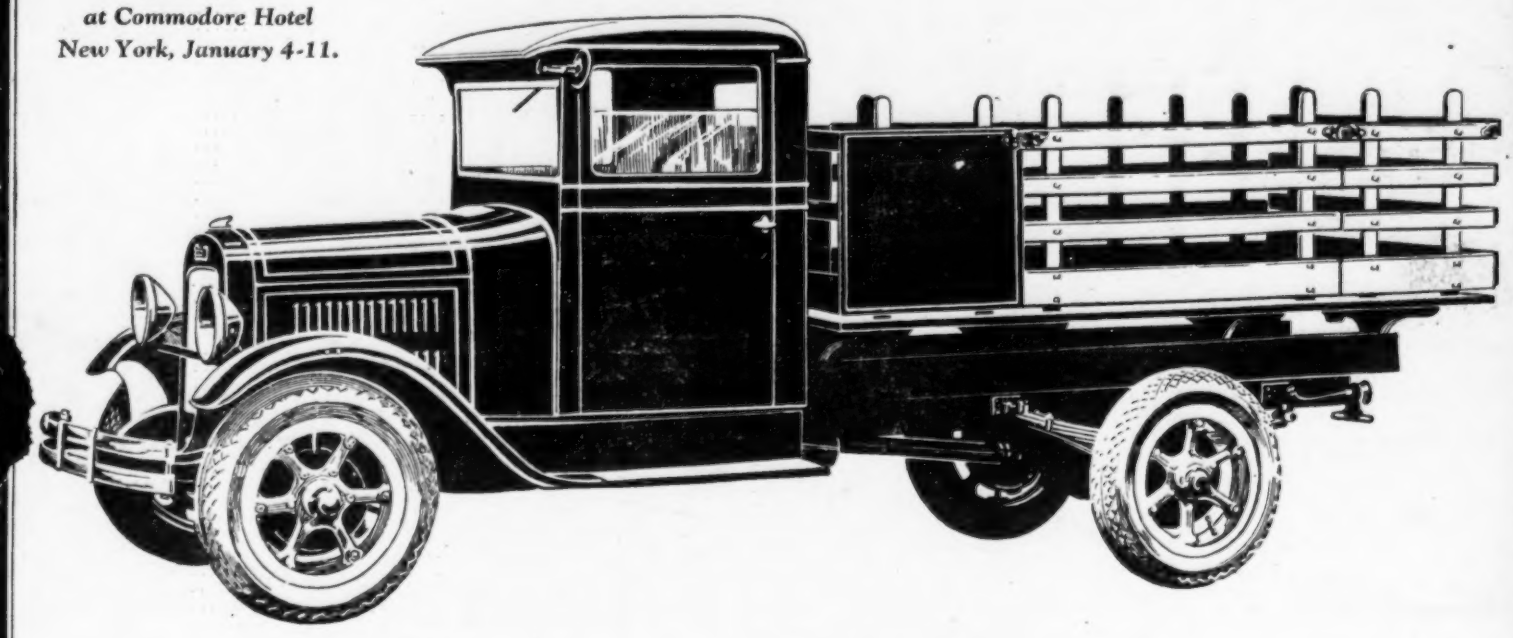
Newark, N. J., Dec. 30.—Ground was broken Saturday for the new Westinghouse Electric and Manufacturing Company plant in Haynes Avenue. The first unit will be a $700,000 warehouse. The plant will employ 15,000 persons. Linde & Griffith have the foundation contract. General contractors are the Public Service Production Company.

OTIS STEEL USES CHRISTMAS TO KEEP UP WITH DEMAND

Cleveland, Dec. 30.—Demand from automobile plants for semi-finished steel warranted operation of open-hearth furnaces at the Otis Steel Company Christmas day, for the first time, except during the war, E. J. Kulas, president of the company, said he had received rush orders for 135,000 tons of body sheets and fenders.

The Greatest Money Making Opportunity You Have Ever Been Offered

On exhibit at Commodore Hotel New York, January 4-11.



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The greatest dollar for dollar value ever offered in truckdom. A new Stewart 1 ton truck embodying a long list of mechanical features formerly found only on the finest trucks now offered at a price that smashes all precedent and opens wide the greatest market any truck has ever had.

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The new Stewart 1 ton truck is not a 1 year proposition. The same quality that has long distinguished Stewarts as "America's Greatest Truck Value" is embodied in this model. A study of its mechanical features will prove this point to any understanding reader.

Here, without question, is an unequalled profit opportunity for either truck or passenger car dealers. Think of the thousands of prospects for a fast, light delivery truck that will give 3, 4, and 5 years of constant, economical, uninterrupted service. Never before has genuine Stewart quality been offered at so low a price.

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CHASSIS

Read this list of mechanical features . . . . . everyone spells QUALITY

ENGINE—Four cylinder, truck motor, 3¾" bore, 4½" stroke. Six cylinder motor at extra cost.

CARBURETOR—Latest Stromberg with accelerator pump, fuel economizer and air cleaner.

IGNITION—Delco-Remy—engine driven distributor.

GENERATOR—Delco-Remy—direct gear driven, also Delco-Remy starter with Bendix gear shift.

TRANSMISSION—4 speeds forward and one reverse. Shafts mounted on annular bearings.

STEERING GEAR—Ross cam and lever type.

FRAME—Pressed steel side rails 9" deep.

REAR SPRINGS—50" long, 2½" wide, bronze bushings, 11 leaves.

REAR AXLE—Truck type, heavy cast housing. Heavy type differential, mounted on Timken roller bearings, strong enough for dual wheel equipment.

BRAKES—Four wheel Bendix.

SPICER DRIVE SHAFT—3" tubular, for standard wheelbase with metal covered dust proof Spicer joints. Three joint shafts on 140" wheelbase chassis.

WHEELS—Metal. Six spokes, demountable rims.

WHEELBASE—Standard wheelbase 130". Special 120"; at extra cost 140".

Models
BEVEL AXLE

1	ton 4 Cylinder....	$ 695
1	ton 6 Cylinder....	795
1¼	ton 6 Cylinder....	1295
1½	ton 6 Cylinder....	1495
2	ton 6 Cylinder....	1695
2½	ton 6 Cylinder....	1990

All prices f.o.b., Buffalo, N. Y.

Stewart
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STEWART MOTOR CORPORATION
BUFFALO, N. Y.
Export Branch: 1 BROADWAY (Dept. 11) New York City, U. S. A.
Cables: Stewartruk New York. Codes: Acme, Bentley.

Models
WORM AXLE

2	ton 6 Cylinder....	$2290
2½	ton 6 Cylinder....	2690
3	ton 6 Cylinder....	3290
3½	ton 6 Cylinder....	3690
5	ton 6 Cylinder....	4990
6-7	ton 6 Cylinder....	5700

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